

THE UNIVERSITY OF CHICAGO

THE SACRIFICIAL ECONOMY: ON THE MANAGEMENT OF SACRIFICIAL
SHEEP AND GOATS AT THE NEO-BABYLONIAN/ACHAEMENID EANNA

TEMPLE OF URUK (c. 625-520 BC)

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BY
MICHAEL G. KOZUH

CHICAGO, ILLINOIS

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Dates, Abbreviations, and Notes on Citation Style

Dates are given in the form: day (Arabic)-month (Roman)-regnal year (Arabic); accession years are marked by 00, and intercalary Ulūlu and intercalary Addaru are indicated with VIb and XIIb, respectively. Broken or otherwise unknown days, months, or years are marked by xx.

Cuneiform texts and publication series are cited with the system of abbreviations of the *Assyrian Dictionary of the Oriental Institute of the University of Chicago* (CAD), except in the use of italics, and with the following additions and exceptions:

Gehlken, *Uruk I* =

Gehlken, Erlend. *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv, I: Texte verschieden Inhalts*. Ausgrabungen in Uruk-Warka Endberichte, Band 5. Mainz am Rhein: von Zabern, 1990.

Gehlken, *Uruk II* =

Gehlken, Erlend. *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv, II: Texte verschieden Inhalts*. Ausgrabungen in Uruk-Warka Endberichte, Band 11. Mainz am Rhein: von Zabern, 1996.

Sack, *Cuneiform Documents* =

Sack, Ronald. *Cuneiform Documents from the Chaldean and Persian Periods*. Cranbury: Associated University Presses, 1994.

Spar, *Studies* =

Spar, Ira. "Studies in Neo-Babylonian Economic and Legal Texts." Ph.D. diss., University of Minnesota, 1973.

In cases where texts and commentary appear in the same volume, I cite the texts in CAD style (with the above exceptions), and the discussion in dissertation style.

Symbols and abbreviations for texts and translations

- / In a personal name, to be read “son of,” “daughter of,” or “descendent of,” followed by the name of the father or ancestor.
- // In a personal name, to be read “descendent of,” followed by the name of the ancestor.
- < > Emended text. The cuneiform sign(s) between these symbols is (are) not on the original tablet and need(s) to be inserted.
- << >> Emended text. The cuneiform sign(s) between these symbols is (are) on the original tablet but need(s) to be expunged.
- () Marks supplied or optional signs or translations; often used to add clarity to translations.
- [] Marks broken or missing text.
- { } Marks partially preserved text.
- x Marks an illegible or uncertain sign.
- ! Marks an emended sign or an improved (or suggested) reading.
- lo.e. lower edge
- obv. obverse
- rev. reverse
- u.e. upper edge
- DN divine name
- GN geographic name
- MN month name
- PN personal name
- RN royal name
- pl. plural
- sing. singular

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- | | |
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This is dedicated to my wife Jennifer—as is everything, always.

The Sacrificial Economy: On the Management of Sacrificial Sheep and Goats at the Neo-Babylonian/Achaemenid Eanna Temple of Uruk (c. 625-520 BC).

Michael G. Kozuh

Advisor: Matthew W. Stolper

ABSTRACT

From c. 625 until 520 BC, the Eanna temple of the southern Babylonian city of Uruk had under its control herds totaling tens of thousands of sheep and goats. This dissertation analyzes the management of these herds on the basis of about 550 legal and administrative texts from the temple's archive.

Production (i.e., the maintenance and growth of the herds) took place through share breeding contracts with temple outsiders. The temple fixed the annual amount due from the contractors (called *nāqidus*, “herdsman”) in lambs, kids, wool, and goat hair and then over time calculated its share of each herd’s yearly increase. Yet the temple’s share was not collected every year. The contractors held back animals—mainly ewes—from the temple’s share, running balances that increased with the growth of the herd and decreased when the temple took male lambs for sacrifice. In practice, the temple stored its herds on the hoof with its contractors and periodically drew returns from them.

The Eanna’s regular animal sacrifices consumed 3,000 - 4,000 male lambs annually. The sacrifices were organized through two internal administrative bureaus whose staffs were

supported by rations from the temple. The “Offering Shepherd” (*rē’i sattukki*) and a vaguely defined bureau called the *bīt urī* supplied most of the animals for sacrifice, and the vast majority of these were animals taken in from the contractors.

The records of the transfer of animals between contractors and the temple, and among temple bureaus and administrators, were meticulous but difficult when read apart from a systematic context. They are reanalyzed on the basis of this division of management into an external sphere of herding contractors and an internal sphere of attached administrative bureaus.

The external sphere also intersected with the temple at the “bow obligation,” which required the temple to supply men for royal service. The contractors provided the men for this obligation, but the temple equipped and supplied them. Yet, apart from this obligation, there is little evidence that the crown and provincial governments, which regulated the temple’s herding economy, extracted regular returns from it.

CHAPTER ONE

INTRODUCTION

I. The Eanna of Uruk

In the late fifth century B.C., the Eanna temple at Uruk sacrificed a minimum of nine lambs every day in its basic routine of offerings to the gods; in addition to the daily requirements, special occasions and festivals demanded the sacrifice of as many as ninety lambs in a single day. One can therefore estimate that at this time the Eanna sacrificed between three thousand five hundred and four thousand lambs a year. There were over one hundred and twenty herdsmen connected to the Eanna, and the temple expected there to be tens of thousands of sheep and goats under their responsibility.¹ These herdsmen delivered male lambs to the Eanna for sacrifice, and the temple had a rigidly bureaucratic system for the care, maintenance, and ritual expenditure of those lambs. The aims of this dissertation are to analyze the economic organization of the entire system of sheep and goat maintenance and utilization, to explore the economic and social relationships between the Eanna and its herdsmen, and to integrate the study of the Eanna's animal economy into the developing picture of the Neo-Babylonian temple economy as a whole.

¹ Mariano San Nicolò ("Materialien zur Viehwirtschaft in den neubabylonischen Tempeln I," *Or. NS* 17 [1948]: 285) estimates that the Neo-Babylonian/Achaemenid Eanna had between 100,000 and 150,000 sheep and goats at any given time; Erlend Gehlken (*Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv, II: Texte verschiedener Inhalts*, Ausgrabungen in Uruk-Warka Endberichte, Band 11 [Mainz am Rhein: von Zabern, 1996], 4) cites unpublished texts that give totals of 37,539 and 52,292 animals.

The Eanna was the main temple of the Babylonian city of Uruk in the Neo-Babylonian and early Achaemenid periods.² Legal and administrative texts from the Eanna archive date from the reign of the first Neo-Babylonian king Nabopolassar until the second year of Darius I (c. 625 to 520 B.C.); the largest numbers of known texts date to the reigns of Nabonidus, Cyrus, and Cambyses (c. 555 to 522 B.C.). It is estimated that about 9,000 published and unpublished texts and fragments related to the functioning of the Eanna's economy during the Neo-Babylonian and early Achaemenid period are scattered among many museums and private collections today (see here, Chapter Two, pp. 12ff.). Of the published Eanna texts, about 550 deal with the management of sheep and goats.

As I demonstrate throughout this dissertation, the administrative terminology that the Eanna employed to monitor and book its animal economy borrows the regular language of Babylonian bookkeeping (in terms of credits, debits, arrears, obligations, etc.), but the implication of that language is at times quite different from its face value. That is, the Eanna's institutional economic organization took form and evolved as the temple dealt with its economy as a whole; animals were one part of that economy, yet their economic characteristics—e.g., the fact that animals make various products depending on age and sex, they need pasture and constant supervision, harvesting animals for meat and skins means forgoing their renewable products, and all animals eventually die—gave rise to

² In this dissertation, "Neo-Babylonian period" and the like refer to the time between the reigns of Nabopolassar and Nabonidus, inclusive (625-539 B.C.); "Achaemenid period" and the like refer to the subsequent time of Persian suzerainty over Babylonia (539-331 B.C.). "Early Achaemenid period" refers to the time from the beginning of the reign of Cyrus through the second year of Darius I (539-520 B.C.).

relationships of debt, credit, accumulation, storage, and expenditure that were inherently different from, although expressed in the same terms as, those same relationships where things like raw materials, tools, grains, dates, and even animal products alone are concerned. The underlying purpose of this dissertation is to expose the relationship between the nature of sheep and goat care and maintenance and the Eanna's administrative methodology and bookkeeping.

In addition, every text that this dissertation deals with was generated to document an aspect of the care, maintenance, assessment, or ritual slaughter of the Eanna's sheep and goats. It is important to try to understand what purpose the texts themselves served for the Eanna. Why, for example, did the Eanna draw up animal inventory texts at irregular intervals, and how did the temple use those texts? What is the purpose of a four-line text, no bigger than a thumbnail, marking the receipt of a goat? Why do some transactions require witnesses, while others do not? I will pause at various points throughout this dissertation and attempt to discern how the Eanna used the actual texts in assessing and booking its animal economy.

Finally, contemplating the function of the texts themselves, and working through the legal and administrative language in a way that understands it in light of an actual animal economy, allows us to approach complex issues associated with the Eanna's institutional organization. Paramount among these is a deeper understanding of the division of labor between the Eanna's immediate personnel and its outside contractors (see here, section II), which, in various forms, cuts across many aspects of the Eanna's economy as a whole. The contractors held the Eanna's animals in a type of "share-breeding"

agreement, and it is only by working through the administrative language and associated text types that we can begin to gain a full appreciation of the relationship between them and the Eanna. This approach also allows us to consider broader questions on the relationship between the Eanna and the outside world: from where, for example, does extra-temple intake in animals derive, and what does that tell us about that nature of that intake? How does the Eanna deal with the misappropriation of its animals, whether in the form of outright theft by outsiders or deliberate misconduct on the part of its contractors? And how do we explain the fact that the royal administration is associated with various aspects of the Eanna's livestock management? Was this simply the manifestation of a policy to extract taxes from the Eanna?

This dissertation is organized in the following way. Chapter Two is a review of the sources (and methodology of collecting them), prior literature, and terminology associated with the Eanna's livestock management. The majority of relevant texts are from museum collections that have their origin in the looting of the site of Uruk, thereby obliterating archaeological context. Extensive publication of Eanna texts from these collections gives us a general overview of the scope of the Eanna archive, revealing, in broadly defined categories, what the archive does and does not cover. With this information, one can approach the documentation through channels that are based upon modern regroupings of texts. I discuss Govert van Driel's regrouping of the Eanna's livestock texts in Chapter Two, along with a reconsideration of the function of two common text types (livestock inventory texts and *amirtus*). I then take Mariano San Nicolò's five-part "Materialien zur Viehwirtschaft in den neubabylonischen Tempeln"

into consideration, and conclude with a brief review of the terminology for sheep, goats, and herds at the Neo-Babylonian and Achaemenid Eanna.

Following this are studies of the external (Chapter Three) and internal (Chapter Four) livestock management of the Eanna of Uruk; I describe the main differences between these two spheres of management in Section II of this chapter. Chapter Three begins with a discussion of the lynchpin of the external management, the herdsmen (*nāqidus*). After an analysis of the contractual relationship between the herdsmen and the Eanna, I then proceed to discuss the application of that relationship to actual practice, as it is revealed in NBC 4897. This leads to a detailed analysis of the meaning and use of the word *rēhu*, which is crucial for understanding the relationship between the Eanna and its herdsmen. I argue that the word, which literally means “remainder,” is better understood as “balance,” and then I discuss it in terms of fluctuating balances, increasing balances, decreasing balances, and, finally, the commutation of balances. Next, I discuss the herd supervisors (*rab būlis*), who had authority over the herdsmen. It is difficult to discern the nature of that authority with precision. Finally, I reconsider the case against a so-called “archthief” who was placed over the Eanna’s entire system of livestock management and was connected to the royal administration at Babylon. In general, I try to understand the accusations against him in light of his official position.

Chapter Four, on the internal livestock management, is straightforward. The Eanna’s internal livestock management divides into two branches: the offering shepherd (*rē’i sattukki*) and the *bīt urī*. The former is the name of a distinct profession within the temple dedicated to preparing the animals for sacrifice. The latter is a term for a place

within the temple precinct where stock houses and stock feeders operated. The texts that detail the functioning of the internal management are all administrative in nature; by taking account audits as primary information on the total intake and outlays of the offering shepherd (information on the *bīt urī* is scanty), we can begin to fit other texts into the general schema. With this we are able to make some general observations on the nature and functioning of the internal management. For example, it becomes immediately clear that the internal management dealt almost exclusively with male lambs, and that it distributed to the external management the females it happened to obtain. We are also able to discern the rough number of animals that the internal management handled per month.

Chapter Five reviews the evidence for the royal “bow obligation,” which, it seems, was served primarily by members of the Eanna’s external livestock management. The texts that detail the bow obligation allow us only to reconstruct a skeletal outline of it. We see, however, that the implementation of the obligation followed the same hierarchical lines as those already established in the personnel relationships of the external management. The herd supervisors (*rab būlis*) arrange for their herdsmen (*nāqidus*) to fulfill the obligation; they also guarantee that their herdsmen will remain on post. The herdsmen, in turn, either hired substitutes or made a member of their immediate family serve the obligation in their stead. In fact, a unique characteristic of the obligation at the Eanna is that it seems to have been organized around households, with each herdsman supplying one Bowman. By contrast, the bow obligation at the Ebabbar temple at Sippar seems to have been served out by all the male members of the same family. The Eanna’s bowmen were organized into groups of ten, with a decurion in

charge, after they left the Eanna's jurisdiction. The bowmen were equipped from the Eanna's storehouses and sent out to one of the Eanna's outposts. The Eanna fed its bowmen through its ration distribution system or provided them with cash to sustain themselves, which I contrast with the system of equipping and provisioning soldiers as it is known from private archives.

Finally, Chapter Six reconstructs the Eanna's livestock economy as a system at work. At first, I view the functioning of the external management in light of the career of a herdsman named Nabû-nâšir, exploring his social, economic, and legal relationships with the Eanna. This affords us the opportunity to apply the conclusions drawn from the previous chapters to the evidence for his career as a herdsman. One is able, for example, to gain some insight into the day-to-day functioning of his herd, and into the relationship between the number of animals in Nabû-nâšir's herd and his animal "balance" with the Eanna. Next, I summarize the evidence for the internal management. Finally, I discuss the evidence for both the Neo-Babylonian and Achaemenid royal administration's interest in the system of animal management at the Eanna. I evaluate this evidence specifically in an effort to discern whether the royal administration extracted live animals from the temple as tax.

II. Internal and External Livestock Managements.

Govert van Driel's division of the Eanna's livestock management into an internal and external sphere, although undeveloped in its particulars, marked a break from

previous literature on the subject.³ Similar divisions have been applied productively in detailed analyses of other branches of temple administration. In general terms, the Eanna needs to be understood as a corporate entity or conglomerate, with a complement of many people and a wide range of real assets. Some operations with the assets were carried out by immediate members of the temple corporation, whereas others were carried out by outside contractors (often referred to as “entrepreneurs,” a term which is appropriate in its etymological sense, but which needs to be carefully purged of its modern connotations of upstart profit-hunting). This dichotomy affects the form of the written records. Relationships among the immediate temple members, and movements of temple assets among them, are mostly recorded in administrative texts (e.g., in unwitnessed memoranda, notes, ledgers, inventories, and audits). Relationships between the temple and its contractors, and the movement of assets between them, are mostly recorded in legal texts, such as leases, promissory notes, surety agreements, and receipts, which require witnesses and mark the creation, or end, of specific obligations.⁴ In the case of personnel involved with sheep and goat management, those who are involved with actual herding are overwhelmingly contractors—collectively, the external management; those who are involved with the receipt and preparation of animals for ritual sacrifice belong to the temple’s immediate complement of personnel—collectively, the internal management. These two branches represent not only two different phases of sheep and goat rearing and use, but two different legal and social relationships with the temple. They are functionally connected, but socially and juridically separate. Members

³ Govert van Driel, “Neo-Babylonian Sheep and Goats,” *Bulletin on Sumerian Agriculture* 7 (1993): 224.

⁴ On this and the nature of the evidence, see van Driel, “Sheep and Goats,” 220f.

do not move from one sphere to another;⁵ the temple's immediate complement of personnel did not breed animals, nor, for that matter, did members of the external sphere involve themselves in animal sacrifice.

The distinction between the two spheres of sheep and goat management is ultimately reflected in the fact that members of the immediate temple household appear on the Eanna's ration lists, whereas the outside contractors do not.⁶ Scholars use the appearance or non-appearance of certain professions in temple ration lists as a way to distinguish between different types of temple personnel engaged in similar activities.⁷ It is, for example, one of the differences between the temple's *ikkaru* and *errešu* farmers.⁸ The former depend on the temple for their livelihood, and for this reason appear on ration lists; the latter use their own resources and do not depend on the temple for direct

⁵ Hans Kümmel, *Familie, Beruf und Amt im spätbabylonischen Uruk*, Abhandlungen der Deutschen Orient-Gesellschaft, 20 (Berlin: Mann, 1979), 53, has a chart of possible professional mobility (*Aufstiegsmöglichkeiten*) within livestock management that shows a connection between the internal and external management (the *mušākil alpī* and the herdsmen). The connection is tenuous (as he states *ibid.* n. 51). It is based on a certain Innin-šuma-uṣur, who in a few texts is identified as a herdsman with a patronym and is found in another text as a *mušākil alpī* without a patronym. Even if these are the same Innin-šuma-uṣur, it would be an exception, rather than the rule.

⁶ Members of the internal management regularly appear as well in administrative receipts as recipients of rations, while the others do not. Members of the external personnel do appear in receipt of rations as bowmen (see here, Chapter Five, pp. 233ff.). Exceptionally, a herdsman (from the external management) appears as a recipient of grain in TCL 13 231:38 and UCP 9/1, 30:4 (although these disbursals are not explicitly called rations). In addition to these, GCCI 1 94 mentions silver given to the shepherds for work and rations (line 7: *ana dulli u kurummati*), GCCI 2 219:10 lists a silver payment to a shepherd, and the letter BIN 1 27:25ff. mentions flour for a herd supervisor.

⁷ Bongenaar, for example, designates those who appear on the ration lists as members of “the regular workforce of the Ebabbar.” See his discussion of the offering shepherd (the “herdsman of the regular offerings”), in A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997), 416f., and his discussion of the craftsmen of Ebabbar, *Prosopography*, 296ff.

⁸ See Michael Jursa, *Die Landwirtschaft in Sippar in neubabylonischer Zeit*, Archiv für Orientforschung, Beiheft 25 (Vienna: Institut für Orientalistik der Universität Wien, 1995), 7.

sustenance. This same distinction is found in the division of livestock management at the Eanna. Yet even if these ration lists had never been unearthed, the remaining documentation maintains a clear distinction between the internal and external livestock management.

Attempts to understand the relationship between the temple and people who were contractually, but not necessarily religiously, attached to it are only just beginning. Michael Jursa describes one sharecropper as belonging “to a group of people active on the margins of the [temple], not quite members of the temple household but also not quite out of it.”⁹ This definition also applies to the members of the external management. Its herdsmen (*nāqidus*) were businessmen with financial interests in both temple livestock and agriculture. At times they contracted with the temple for pastureland or made legal arrangements with others for pasture, and they also held urban property.¹⁰ They held the Eanna’s animals on a contractual “share breeding” basis, by which the temple claimed a given percentage of the yearly increase in animals and wool. Having shepherds in their employ, the *nāqidus* certainly did not tend to the animals themselves.

The herds of the external management conform to expected patterns of animal husbandry for the production of meat: the females remained in a herd until they were no longer able to reproduce; consumables in male lambs, fiber, and perhaps dairy were

⁹ “Debts and Indebtedness in the Neo-Babylonian Period: Evidence from the Institutional Archives,” in *Debt and Economic Renewal in the Ancient Near East*, eds. Michael Hudson and Marc Van De Mieroop (Bethesda: CDL Press, 2002), 209.

¹⁰ For the leasing of pasture see YOS 6 26 (here, Chapter Three, pp. 42f.), and for arrangements with others see, for example, YOS 6 40:17-21; for urban property, see AnOr 9 17:19-22, 40-41, which lists houses with *nāqidus* as occupants.

regularly extracted; and the herds moved around in search of good pasture.¹¹ On the other hand, the internal management dealt almost exclusively with male lambs and young male sheep,¹² the vast majority of which it received from the external management, and all of which it sacrificed or sold off. The members of the internal management remained in the Eanna precinct, and there is no indication that they bred any of their own animals. In terms of animal management, the primary purpose of the external management was to increase and maintain the temple's herds, whereas the primary purpose of the internal management was to hold and prepare the animals for ritual sacrifice.

¹¹ The evidence shows that the Eanna kept livestock for “energy offtake” (see Richard Redding, “Decision Making in Subsistence Herding of Sheep and Goats in the Middle East,” Ph.D. diss. [University of Michigan, 1981], 30f.), which in practical (and schematic) terms means that the temple extracted male animals for meat instead of keeping them alive for wool. This is reflected in the few texts that give actual herd counts; the ewes far outnumber the rams (see here, Chapter Three, pp. 65f.), meaning that the male lambs were harvested to the minimum number necessary to impregnate the ewes. By contradistinction, Ur III texts from Lagash show nearly equal numbers of (castrated) males and females, which indicates that those animals were kept primarily for wool (see Daniel Snell, “The Rams of Lagash,” *Acta Sumerologica* 8 [1986]: 179).

¹² See here, Chapter Four, pp. 202f. on the redistribution of female animals. Exceptionally, YOS 6 142:11f. mentions female *irbu* lambs given to the offering shepherd (although he is not named specifically, the Šuzubu in these lines is almost certainly the known offering shepherd of the same name). For the rare use of female lambs and kids in ritual, see OECT 1 plates 20f., lines 93-97 (edited by Gilbert McEwan, “Distribution of Meat in Eanna,” *Iraq* 45 [1983]: 187-198), although note that this text dates to the ninth century BC.

CHAPTER TWO

SOURCES, METHODOLOGY, PRIOR LITERATURE, TERMINOLOGY

I. The Eanna Archive

The cuneiform texts that this dissertation uses to reconstruct the economy of sheep and goat management at the Eanna of Uruk all stem from what is called the Eanna “archive,” yet what constitutes that archive is ill-defined and debatable. In this chapter I discuss first how one is able to study various segments of the Eanna’s economy from the widely dispersed and incomplete evidentiary record. Second, relying on van Driel’s prior work, I discuss the Eanna’s livestock management “dossier,” with a detailed exposition of the two most common text types (livestock inventory texts and *amirtus*). Third, I discuss my methodology for collecting evidence, and then, fourth, I critique prior scholarship on livestock management. Finally, I provide a brief discussion of sheep and goat terminology.

Most texts that relate to the functioning of the Eanna temple of Uruk in the relevant time period are found in collections from Iraq to California, with significant numbers of texts at Yale and the Louvre, in Berlin and Heidelberg, and an unknown number in Baghdad. The majority of those texts derive from both quasi-legitimate excavations and outright pillaging of the site of Uruk—modern Warka—during the nineteenth and

twentieth centuries.¹ As texts poured out of the site they were siphoned off for museum collections or made their way to the nascent antiquities market. For most of these tablets there is no hope of recovering detailed archaeological provenance. For others, especially the material held in various German collections, van Driel hoped that the publication of the Uruk excavations reports (beginning with the 1928/29 season) might provide some hints at provenance.² This remains to be seen. Texts in Gehlken's *Uruk I* and *Uruk II*, and Kessler's *Uruk: Urkunden aus Privathäusern* (although these latter texts are not used in this dissertation) are the first published texts from excavations at Uruk with a reliable archaeological provenance and, for most, a detailed chain of custody.³

In spite of this disheartening state of affairs it is not difficult to ascribe texts to the Eanna archive (loosely defined). The various criteria one uses to identify Eanna texts (e.g., the specific mention of the Eanna, Uruk, or Urukian satellite towns in the text itself, personal names and prosopography, the appearance of Urukian vocabulary or phraseology, and so on) easily and undoubtedly preclude ascription to other archives, such as the Ebabbar temple of Sippar or various private ones (including those from Uruk itself). Michael Jursa puts the size of the Eanna archive at 9,000 tablets and fragments, of which, he says, 4,600 are published or known to him through unpublished

¹ See Olof Pedersén, *Archives and Libraries in the Ancient Near East: 1500-300 B.C.* (Bethesda: CDL Press, 1998), 204f., and Paul-Alain Beaulieu, *The Pantheon of Uruk during the Neo-Babylonian Period*, Cuneiform Monographs, 23 (Leiden: Brill; Boston: Styx, 2003), 2ff.

² Govert van Driel, "The 'Eanna Archive,'" *BiOr* 55 (1998): 60f.

³ Karlheinz Kessler, *Uruk, Urkunden aus Privathäusern: Die Wohnhäuser westlich des Eanna-Tempelbereichs*, Teil 1, Ausgrabungen in Uruk-Warka Endberichte, Band 8 (Mainz: von Zabern, 1991).

transliterations.⁴ I have limited my evidentiary corpus to published texts, although throughout this dissertation I attempt to differentiate between gaps in knowledge due to insufficient source material, which eventually may be bridged by unpublished texts, and gaps in knowledge due to the fact that some aspects of the Eanna's economy were simply not documented.

With no dearth of information, then, the task for the historian becomes organizing the texts in such a way that they illuminate one's subject to the fullest possible extent. In general, Jursa suggests four methods of doing this (either singly or in combination).⁵ In this dissertation, I use a modified version of his third method. For this he argues that one "can focus on the records' subject matter" and thus begin to differentiate between different subject files or dossiers (e.g., a grain file, livestock file, personnel file, and so on). These dossiers essentially reconstruct an administrative department within the temple that in turn allows us to investigate the economic or social system that generated the texts. It is entirely possible, and indeed likely, that the dossiers do not mirror native categorizations of texts, either in form or function. Such recategorizations may cause problems in terms of reconstructing the archive as a whole, but they are useful heuristic tools with which to understand any particular branch of the temple's economy. One can, for example, presuppose a "Personnel Department" in order to understand the functioning and maintaining of the Eanna's workforce, even though such a department certainly never existed. Indeed, knowing how the Eanna's personnel functioned as a whole may

⁴ Michael Jursa, "Accounting in Neo-Babylonian Institutional Archives: Structure, Usage, and Implications," in *Creating Economic Order: Record-keeping, Standardization, and Development of Accounting in the Ancient Near East*, eds. Michael Hudson and Cornelia Wunsch (Bethesda: CDL Press, 2000), 148 (esp. note 9).

⁵ Jursa, "Accounting," 149.

help eventually to break down the heuristic model into a more representative schema. That is, from the first model one might be able to connect various segments of the workforce to their administrators interspersed throughout the Eanna's bureaucracy. The next step would then be to understand how these various administrators related to each other and to the uppermost levels of the temple hierarchy. From here one can begin to discern whether the administrators were incorporated into a functioning whole, whether they functioned independently of one another, or some sort of amalgamation of these.

As van Driel himself notes, it is not difficult to find problems with these dossiers. Eanna texts simply do not fall into our delineated categories, and a thorough investigation of any aspect of the Eanna's economy only leads to dissatisfaction with any classificatory system. That being said, van Driel does attempt to account for the scope of the whole (published) archive, and consistency between and among various classificatory groups would be broken if one redefined any particular category (in addition to the intrinsic problems that would come about by this reclassification). In other words, I think that future research will be aided more by retaining van Driel's classifications, and the problems that come with them, than it would be by reworking the textual categories piecemeal, thereby divorcing them from van Driel's overall schema. This notwithstanding, after discussing van Driel's classification I will propose a supplementary reclassification of the texts. This reclassification, however, is meant only to serve the aims of this dissertation and does not attempt to fit the texts into the wider scope of the Eanna archive.

Van Driel offers two dossiers for the Eanna's livestock management: "Administrative Jurisdiction and Accounting" and a general "Animal Husbandry" which, it appears, broadly reflect the difference between witnessed legal texts and unwitnessed administrative texts, respectively.⁶ These dossiers are mixed into his general Eanna schema of text types; I have retained van Driel's nomenclature and categories here verbatim—even when they are in less than idiomatic English—and, when applicable, I have cross-referenced my discussion of text types to van Driel's sub-categories.

I. Administrative Jurisdiction and Accounting (van Driel, "Eanna," #2, pp. 73f.):

- a. Statements
- b. Witnessed Protocol
- c. Bail
 - See here, Chapter Three, pp. 98ff (on suretyship).
- d. Verdict
- e. Conditional Verdict
- f. Arrangements
 - This category is unclear as all of the texts listed here could easily fall under other categories.
- g. Promises to Deliver
 - I would categorize this as "*obligations to deliver*" as these can take the form of either a promise or an order. Perhaps this is Gehlken's *u iltu* category as well.⁷
- h. Property in Lieu of Backlogs
 - See here, Chapter Three, pp. 84ff.

II. Animal Husbandry (van Driel, "Eanna," #10, p. 78):

- a. Mixed, cattle and sheep
(van Driel's categories b-f deal with cattle)
- g. Tabulated lists of offerings (= tabular sacrifice texts)
 - See here, Chapter Four, pp. 191ff.
- h. Hides and skins

⁶ These are found in van Driel, "Eanna," 71-79.

⁷ Erlend Gehlken, *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv, I: Texte verschiedener Inhalts*, Ausgrabungen in Uruk-Warka Endberichte, Band 5 (Mainz am Rhein: von Zabern, 1990), 21.

- i. Sheep big and tabulated texts
 - Van Driel maintains that there are forty-one texts of this type, but this number is expressly contradicted by van Driel himself in another article, where he lists only four texts that fit this description.⁸ It is a useful categorization as such, but it remains unclear to me what it entails for him. Perhaps this should simply be called “Large Inventory Texts”? If so, this would encompass Gehlken’s *minūtu*, *amirtu*, and Restentafel texts,⁹ but the total of them is still considerably less than forty-one.
- j. Herd inspections sheep
 - This is Gehlken’s “Standardurkunde.”¹⁰ See here, pp. 23ff., where I relabel these “livestock inventory texts.”
- k. Management sheep, small texts
 - I discuss some of these texts here, Chapter Four, pp. 145ff. This would (I assume) include Gehlken’s *u’iltu* and Quittung categories.
- l. Sheep, *irbu*
 - See here, Chapter Four, pp. 164ff.
- m. Dead sheep
 - See here, Chapter Four, pp. 199ff. Many texts that deal with dead sheep fall under Gehlken’s “Quittung” category.¹¹
- n. Sheep *rē’i sattukki* and *bīt urī*
 - Again, this is a fairly unclear categorization, and would cross-link with categories g, i, k, l, and m. My database lists 97 texts that are associated with the offering shepherd (this number would include, for example, all the tabular sacrifice texts) and 47 for the *bīt urī* (most of which also mention the offering shepherd).
- o. Bowmen of the herdsmen
 - See here, Chapter Five.

Wool and textiles are mentioned under his #7 (Crafts) subdivision f. Missing from van Driel’s categorization are a subgroup for texts that deal with animal exchanges and sales, one for internal memoranda regarding livestock, and one for letters.¹²

⁸ Govert van Driel, “Neo-Babylonian Sheep and Goats,” *Bulletin on Sumerian Agriculture* 7 (1993): 243 note 8.

⁹ Gehlken, *Uruk* I, 20f.

¹⁰ Gehlken, *Uruk* I, 21f.

¹¹ Gehlken, *Uruk* I, 21f.

¹² On the sale of temple animals in order to obtain silver, see A. C. V. M. Bongenaar, “Money in the Neo-Babylonian Institutions,” in *Trade and Finance in Ancient Mesopotamia*, MOS Studies 1, Uitgaven

Van Driel mixed together classifications of texts by subject matter (e.g., II m Dead sheep) and by type (e.g., II i Sheep big and tabulated texts). This approach is unavoidable—and if nothing else it serves to illustrate that there was not a set and regular method by which the Eanna booked its livestock—but in the end his schema does not suit the purposes of this dissertation well. I present here a schema that attempts to classify the texts in a way that is more in line with my findings. The basic classificatory division of texts is that between those texts that are associated with the care, propagation, and harvesting of sacrificial sheep and goats and those texts that are associated with the management of the harvested sheep and goats; the further subdivisions of these classifications arise from text-producing relationships or junctures within the Eanna's animal economy. I, as well, intermix classifications of texts both by type and by subject matter, as the latter encompass a diversity of text types.

1. The care, propagation, and harvesting of sacrificial sheep and goats.

- a. Legal texts that stem from the relationship between the Eanna and its external livestock management
 - i. Leases of livestock
 - ii. Obligations to deliver sheep and goats
 - iii. Surety agreements
 - iv. Texts dealing with the management of balances
 - v. Texts resulting from the mismanagement or misappropriation of sheep and goats (van Driel's statements, protocol, verdict, etc)
 - vi. Audits

van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 84, ed. J.G. Dercksen (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1999), 166, although he adds, noting that the temples both bought and sold animals, "it is doubtful whether the outcome [of selling animals] would be that the temples made much profit out of this trade." For internal memoranda, see here, Chapter Three, p. 79 note 79. Letters often deal with localized matters of sheep and goat management, but, given the fact that the senders and recipients are impossible to identify with other people known from the Eanna archive, they are of limited value for this dissertation. Pertinent letter subjects are the lack of animals for offerings (e.g., YOS 3 75, YOS 3 92, YOS 3 99), instructions on how to carry out a particular sacrificial ceremony (e.g., YOS 3 56, YOS 3 60), information on the shearing of sheep (e.g., BIN 1 14, BIN 1 56), and instructions about the bow obligation (e.g., YOS 3 44, YOS 3 190).

- b. Administrative texts that stem from the relationship between the Eanna and its external livestock management
 - i. Livestock inventory texts
 - ii. *amirtus* (inspections)
 - iii. Texts dealing with the management of balances
 - iv. Texts marking the receipt of sheep and goats
 - v. Texts marking the transfer of female sheep and goats to the external management
 - vi. Memoranda
 - c. Additional administrative texts that stem from the receipt of sheep and goats
 - i. Texts marking the receipt of sheep and goats from the royal administration
 - ii. Texts marking the receipt of sheep and goats as *irbu*
 - iii. Texts marking the receipt of sheep and goats from various extra-temple sources
 - d. Letters
2. The management of the harvested sheep and goats
- a. Audits of temple departments associated with animal sacrifice
 - b. Administrative texts marking the receipt of sheep and goats by temple departments associated with animal sacrifice (overlaps I c)
 - i. Texts marking the receipt of sheep and goats from the external management
 - ii. Texts marking the receipt of sheep and goats from the royal administration
 - iii. Texts marking the receipt of sheep and goats as *irbu*
 - iv. Texts marking the receipt of sheep and goats from various extra-temple sources
 - c. Administrative texts that mark transfers of sheep and goats between temple departments
 - i. Texts marking the receipt of sheep and goats from the offering shepherd or *bit urî* for sacrifice
 - ii. Texts marking the transfer of sheep and goats between the offering shepherd or *bit urî* and other temple departments
 - iii. Memoranda
 - d. Texts associated with the non-sacrificial utilization and consumption of sheep and goats
 - i. Texts marking the sale or purchase of sheep and goats
 - ii. Texts marking the utilization of animal fiber and hides
 - iii. Texts marking the use of infertile ewes as food rations
 - e. Tabular sacrifice texts (of unclear administrative use)
 - f. Letters
3. Texts associated with the bow obligation

This schema is by no means meant to give the impression that all the texts that fall under individual rubrics fit into regular patterns, as most do not. Indeed, one must account for the fact that any particular movement of assets in the Eanna could have been documented in a number of ways; a classificatory system based only on types of texts will obscure both the multifaceted economic relationships that appear within the texts themselves and the fact that a note for a relevant transaction may be buried in a text with seemingly unrelated subject matter. A prior attempt to classify the economic texts associated with the Eanna's livestock management by types demonstrates the limits of this approach. Gehlken's brief list of text types for sheep and goat management (*Uruk I*, 20ff.) gives the impression that there was an orderly system for booking livestock (he calls it "Die ordnungsgemäße Abrechnung"), but quite the contrary is true. Aside from his empty "various" category (h), he lists seven text types (a-g). For his type (a) "*minūtu*" (read: *epēš nikkassi* [see his p. 20 note 17]) there is one published example (YOS 7 8), and three others (YOS 7 74, YOS 7 143, and NBC 4897) are distinct variants to this type;¹³ indeed, as he notes, the "lehrreiches Beispiel" he gives for this category, YOS 6 141, is actually an audit of poultry. For (b) "*amirtu*" see here, pp. 22f. Three texts (YOS 7 39, 83, and 87) fit his definition of a sheep and goat *Restentafel* (c),¹⁴ but only two (YOS 7 39 and 83) are alike in form, and there is no evidence for this type of text before the Achaemenid period (they are probably to be associated with Gimillu the *ša muhhi rēhāni*). His explanation of the "*u ɿltu*" (d, cross-referenced to his discussion in [a]) category is inadequate. This type of text—a binding agreement (although the

¹³ GCCI 2 371 appears to be another account settlement of the offering shepherd, but it is very broken.

¹⁴ I am not including YOS 7 46 in this list because it deals mostly with *rēhus* in cattle.

word *u²iltu* rarely appears)—is associated with the Eanna’s livestock management, but its manifestation takes many forms. In fact, these manifestations vary so widely that putting them into one undefined category is no more explanatory than not categorizing them at all (compare, for example TCL 13 162 [here, Chapter Three, pp. 97f.] to YOS 7 163 [here, Chapter Three, pp. 106f.]). This is equally true for his *Quittung* and *Abgabentafel* (e) and (f), both of which occur, but not with any sort of regularity or uniformity. Indeed, his *Quittung*-texts are found in a variety of forms documenting a multiplicity of different relationships, both between the Eanna and its external management and between departments within the Eanna itself. In other words, the classifications are either too broad to be useful, or so specific that they cover only a handful of texts. Yet even if we concede the widest possible breadth for what might fall under Gehlken’s intermixed Babylonian and German rubrics, he still fails to account for the short administrative texts that make up most of the evidence for the internal management, makes no mention of texts dealing with the theft or misappropriation of animals, and fails to classify a text like YOS 6 155, which is the cornerstone of Chapter Three of this dissertation.

There are only two types of texts associated with livestock management that are more or less regular and standardized: livestock inventory texts (= van Driel’s II j “Herd inspections sheep” and Gehlken’s [g] “*Standardurkunde*”) and tabular sacrifice records (van Driel’s II g “Tabulated lists of offerings”). It remains to be seen whether *amirtus* (herd inspections) can be described in this way as well. I will first discuss the problems associated with understanding the function of the sheep and goat *amirtus*, and then

proceed to a detailed explication and reevaluation of livestock inventory texts. Tabular sacrifice records are discussed here, Chapter Four, pp. 191ff.

I.A. Inspections (*amirtus*)

The purpose of the sheep and goat *amirtu* (“inspection”) and its function within the Eanna’s bureaucracy must await later explication. The extant examples are extremely fragmentary and incomplete. What is more, most are intimately associated with the estimation of wool.¹⁵ Gehlken’s assertion that *amirtu* texts record actually existing animals appears to be correct,¹⁶ but it should be noted that only one published text associated with sheep and goats is explicitly called an *amirtu* (Gehlken, *Uruk* II no. 163), and that the readable part of this text does not conform in the least to Gehlken’s description. It only lists names, and then two columns of deductions (i.e., in *kalūmu* and *parru* lambs and he-goats, but see his notes in Gehlken, *Uruk* II, 4).

Other tabulated texts associated with sheep and goats (e.g., UCP 9/1, 3 and 4, BIN 1 176 and 177) are expressly associated with wool estimation. The first three columns of BIN 1 177 and UCP 9/1, 4 follow the same pattern. The third column lists amounts of wool in talents and minas (specifically labeled as such in BIN 1 177, and manifestly so in UCP 9/1, 4), and, when rendered into mina, it is always $1\frac{1}{2}$ times the primary number in the first column; under many of the numbers in the first column is also a subscript that reads: x (*ina*) *ṣēri*, “x (in the) field.” Clearly, then, the first column is a number of

¹⁵ See, for example, Gehlken, *Uruk* I, no. 42.

¹⁶ Gehlken, *Uruk* I, 21 (b).

animals; it is perhaps a projected number, in which case, then, the (*ina*) *šēri* may simply signify the difference between what is projected and what is actually available. The number in the second column—between the number of animals and the projected amount of wool from them—is labeled *kalūmu* in BIN 1 177, so it must represent extractions in male lambs. BIN 1 177 has a fourth column which is labeled *miṭītu*, “shortage,” but is not filled in. BIN 1 176 (see here, Chapter Three, pp. 71ff.) expressly contemplates estimated wool against the amount actually weighed out. Thus, the potential in these texts for understanding how the Eanna administratively dealt with its herds is great, but we need a more complete example with which to begin.

I.B. Livestock Inventory Texts

Livestock inventory texts all follow this pattern (letter = number of animals):

rams	v
ewes	w
male lambs	x
female lambs	y
total sheep	$z (= v+w+x+y)$
he-goat	a
she-goat	b
young m goat	c
young f goat	d
total goats	$e (= a+b+c+d)$
total animals	$f (= z+e)$
<i>ina pan PN</i>	
date	

The majority of livestock inventory texts record only this information, although a few also note extractions from the herd and wool estimations.¹⁷ Most of them date to late spring/early summer.

¹⁷ E.g., GCCI 1 252 (see here, Chapter Four, pp. 151f.).

These texts have been variously characterized. San Nicolò states that they may indicate “das Ergebnis der Jahresabrechnung mit einzelnen *nāqidu* über Horn- und (oder) Kleinvieh.”¹⁸ Similarly, van Driel refers to these texts as “on the spot” herd inspections, arguing that such texts are “the summing up of the herds after the shearing and marking and [thus these texts] form the basis of [the] next year’s assessment.”¹⁹ Gehlken, on the other hand, poses three questions about the nature of these texts;²⁰ I will discuss his questions one and three (respectively: on what occasion were these texts drawn up? and, do these animals represent a “natural” herd?) presently. I believe his question two (do the numbers of animals reported in these texts mark *rēhu* animals or actually existing

¹⁸ “Materialien zur Viehwirtschaft in den neubabylonischen Tempeln III,” *Or. NS* 20 (1951): 134.

¹⁹ Van Driel, “Sheep and Goats,” 231. Rocío da Riva discusses Livestock Inventory Texts in her *Der Ebabbar-Tempel von Sippar in frühneubabylonischer Zeit*, AOAT 291 (Münster: Ugarit Verlag, 2002), 203-209 and 235-237. She states that (*Ebabbar*, 203) “[m]it Sicherheit wurden diese Inspektionen jedes Jahr durchgeführt, allerdings hat man nur Informationen über drei Musterungen, die in der Regierungszeit Nabopolassars stattfanden.” I do not share her certainty in this matter. The three periods to which her livestock inventory texts date are in Nabopolassar years 8, 17, and 20 (see da Riva, *Ebabbar*, 204f., 235ff.), and each period’s set of texts is distinct in some way. The published examples (and those listed in van Driel, “Sheep and Goats,” 257 [appendix III]) from year 8 do not list the numbers of male lambs, have negligible numbers of rams (1 to 3), and also describe the total of animals as *ša PN*. Those that date to year 17 describe the total as the *qabut PN*, “the fold of PN” (see da Riva, *Ebabbar*, 206). Those that date to year 20 are from month VIII of that year (October/November), whereas both of the other sets date to month III (see da Riva, *Ebabbar*, 205), and those from year 20 also do not qualify the relationship between the animals and the herdsman in any way (i.e., with a *ša* or *qabut*, excepting CT 55 447:9). Is it possible that texts from year 8 represent an initial formalization of the relationship between the emerging Ebabbar and its herdsmen, and therefore there was no need to record the numbers of male animals at the outset, as all subsequent calculations would center around the females? Then, in years 17 and 20 there was a general auditing of the Ebabbar’s animals, and the texts from those years record the sizes of the herds after they were recalibrated (and males were extracted, etc.). On the other hand, the Ebabbar’s livestock inventory texts may reflect the difference between direct and indirect types of livestock management. That is, the fact that these animals are not ultimately labeled *ina pan PN*, as they always are at the Eanna, may signify that all the offspring and consumables were considered the property of the Ebabbar—that, in effect, the Ebabbar and its shepherds had a completely different relationship than that between the Eanna and its herdsmen.

²⁰ Gehlken, *Uruk* I, 21f.

animals?) is based upon a fundamental misunderstanding of the nature and function of *rēhu*.

In general, I am hesitant to associate these texts with year-to-year “inspections” because that assumes that they simply tally animals. The insurmountable problem with assuming that these texts represent yearly herd inspections is that the differences in number between male and female animals, and between ewes and offspring, do not in the least appear to conform to those of a natural herd following the winter lambing season. If indeed the purpose of these texts was to tally animals after the winter lambing, one would expect nearly equal numbers of male and female lambs, as males would not be harvested until after they were weaned. Instead, all livestock inventory texts from the Eanna show significant disparities between the number of male and female lambs; they seemingly record something other than the make-up of the actual herd after an inspection.²¹ This has been noted, but not delved into, by others.²²

Contrary to established opinion, I can find no reason to assume that these texts were drawn up every year for every herdsman, nor, for that matter, do I believe there was a strict *Rechnungsjahr* for the herdsmen in general. To the best of my knowledge, no two Eanna texts refer to the same herdsman, nor do these texts refer to the total of animals as “of” (*ša*) a particular year. Moreover, I can find no evidence relating these texts to inspections and inventory taking *per se*. For example, I know of no explicit link between

²¹ In contradistinction, see the list of Aršam livestock inventory texts in van Driel, “Sheep and Goats,” 253 (Appendix I), where the numbers of male and female lambs are usually close to equal. This is also the case in Ur III sheep and goat texts (see Daniel Snell, “The Rams of Lagash,” *Acta Sumerologica* 8 [1986]: 179), where the bookkeeping is centered around wool production.

²² E.g., see van Driel, “Sheep and Goats,” 236f. and Gehlken, *Uruk* I, 22.

these texts and the word *amirtu* or its cognate verb *amāru*, nor is there any indication that they record mathematical projections of herd size.

I believe these texts record the actual animals in a herd either at the herd's legal inception or after a renegotiation of the contract between a herdsman and the Eanna, which would have occurred when there were major changes to an existing herd (e.g., significant extractions or additions, a division of the herd, and so on).²³ A livestock inventory text, then, served to mark the basis from which the Eanna was able to calculate the projected size of any particular herd. Thus, after the original drafting of a livestock inventory text—which served as the administrative counterpart to an actual herding contract—the herdsman would only have needed another inventory text drawn up if the basis of his herd was significantly altered, and/or the herd ceased to function as a whole (e.g., it was split up); he would not have needed a new one drawn up every year. As far as I understand it, van Driel's argument that these texts mark “on the spot” herd inspections because there is evidence (from scribal mistakes) that the texts “were prepared for use on a certain date, but left aside” is equally applicable to my understanding of the texts.²⁴

In a sense these texts do record the “natural” state of the herd at the precise moment of their composition; the numbers of animals reported in these texts probably do indeed

²³ It is also possible that herds were intermittently audited, occasioning the drafting of a new livestock inventory text. In working with the livestock inventory texts for the Ebabbar archive of the early Neo-Babylonian period, da Riva (*Ebabbar*, 205 and 235ff.) has isolated three distinct periods to which livestock inventory texts date (in Nabopolassar years 8, 17, and 20, see here, p. 24 note 19). I cannot find a similar distribution for Eanna texts, but that should not rule out the possibility of irregular audits or that there were select periods in which a herding contract could be renegotiated with the temple authorities.

²⁴ Van Driel, “Sheep and Goats,” 220.

correspond to the exact numbers of animals that were in the herd on the day that the text was drawn up.²⁵ Yet the mathematical relationship between the numbers of ewes and offspring is obscured by the fact that the texts depict a herd in an artificial state, either at its inception or after major changes had taken place.²⁶ Also, the male lambs and young rams recorded in that text may have been sold off the following day. As a result, the usefulness of these texts for analyzing actual herding praxis is limited or altogether negated.

The idea that these texts record the size of a herd at its legal inception will be my working hypothesis about these texts, but it admittedly remains to be substantiated. That is, I am unable to link any one of these texts to another, or to another type of text, in a way that sheds more light on their purpose in general. I base my interpretation on the fact that these texts do not function as receipts (with a few possible exceptions) nor do they record specific future obligations. Instead, they mark the size and makeup of a herd at a specific point in time, and I connect this to my understanding of how the Eanna determined future capital and income from its herds (see here, Chapter Three, pp. 61ff.).

As an aside, it is always risky to evaluate Eanna texts in anything but the most general quantitative terms, but I offer the following observation. The vast majority of livestock inventory texts date to the Neo-Babylonian period (Nabopolassar through

²⁵ See Gehlken, *Uruk I*, 22 (3).

²⁶ As a parallel example, see the herding contract YOS 6 155:1-4, 20-22 (see here, Chapter Three, pp. 40f. and 57f.), which mentions two herds that were granted to two different herdsmen (under different circumstances). I assume that two complementary livestock inventory texts would have been drawn up to reflect the bestowed herd in lines 1-4 and the transferred herd in lines 20-22 (which would have started or significantly altered the herd of the latter herdsman). See my discussion of *rehui* here, Chapter Three, pp. 52ff.

Nabonidus, with the bulk toward the earlier part of this period). I can confidently date 72 livestock inventory texts to this approximately eighty-seven year period (one text every 1.2 years), but I can date only 4 to the reigns of the first three Achaemenid rulers (and the end of the archive), which averages out to one text every 4.25 years. One sheep and goat livestock inventory text (YOS 7 193) dates to the reign of Cambyses (year 7), and none dates to the reigns of Bardija or Darius.²⁷

If my understanding of these texts is correct, and each was discarded after an updated one had been drafted (or after the herd was dissolved altogether), then their temporal distribution conforms perfectly to the characteristics of a dead archive.²⁸ That is, one would expect to find fewer and fewer of these texts toward the end of the temporal span of a dead archive because at that time the vast majority of texts of this sort was still in use and thus had not been put with the other “dead” texts. By contrast, the herds that existed in the generations before the temporal end of the archive had long since changed or ceased functioning, and the proof of that, in the discarding of the old texts, is abundant.

This idea assumes that most of these texts had long-term, open-ended validity in their

²⁷ These numbers are only meant to be suggestive, as there are not nearly enough published texts of this type for serious diachronic comparison. There is a spike in the numbers of these texts in Nabopolassar years 11 to 20 (615-606 BC), to which I can confidently date thirty nine texts (there are eleven texts from Nabopolassar year one until year ten, 624-616 BC). Working back to that point: for the eleven years between the reign of Cambyses and Darius year 2 (529-520 BC): one text (one text per ten years); for the reign of Cyrus (nine years, 538-530 BC): three texts (one text every three years); for Nabonidus years nine to seventeen (nine years, 547-539 BC): six texts (one text every one and a half years); for Nabonidus year one through eight (eight years, 555-548 BC): two texts (one text every four years); for Nebuchadnezzar 31 to 43 (thirteen years, 574-562 BC): four texts (one text every three years); for Nebuchadnezzar 20 to 30 (eleven years, 585-575 BC): two texts (one text every five and a half years); for Nebuchadnezzar 10 to 19 (ten years, 595-586 BC): two texts (one every five years); for Nebuchadnezzar 1 to 9 (nine years, 604-596 BC): two texts (one every four and a half years). Thus, although no period of roughly similar length shows the same dearth of texts as the one at the end of the early Achaemenid period, the numbers of texts are so small that they could easily change with the publication of new texts. For example, the publication of YOS 17 increased substantially the number of livestock inventory texts that date to the reign of Nebuchadnezzar, as did the publication of YOS 19 for the reign of Nabonidus.

²⁸ Following Jursa, “Accounting,” 148f. Da Riva, *Ebabbar*, 207, finds a similar phenomenon with the same sort of texts (although she understands them to mark herd inspections) in the early *Ebabbar* material.

function as administrative counterparts to legal texts (i.e., herding contracts). Yet if indeed van Driel's or San Nicolò's understanding of them is correct (and I am wrong), then the temporal distribution of the known texts is more difficult to explain. That is, if they were drawn up year after year for each herdsman, then one would expect a fairly even temporal distribution until the final year of the archive, as each year's "inventory" superseded and therefore negated—thus rendering "dead"—the previous year's inventory. My hypothesis should be tested as new texts continue to come to light.

II. Methodology for Collecting Evidence

My method of collecting the texts relevant to the Eanna's livestock management progressed as follows. First, I had access to Janos Everling's comprehensive database of first millennium Babylonian texts, and with that I conducted keyword searches for references to specific animals, animal products, and known titles for various types of managers and people associated with livestock management. After performing these searches, I crosschecked the results against the reference cards for the Chicago Assyrian Dictionary, indices in text editions, prior publications, and lists of relevant texts in Govert van Driel's "The 'Eanna Archive,'" *BiOr* 55 (1998): 71-79. I found only a handful of new texts in these supplementary searches. In addition to this, I used Kümmel's prosopography and Everling's list of personal names from Uruk to identify various livestock managers who appear in texts without their professional titles.

My database now contains around 560 published texts from the Eanna that relate directly to the administration of its livestock, the utilization of livestock products, and/or

are associated with its livestock personnel, including the administration of the bow obligation (see here, Chapter Five). This agrees with van Driel's estimate of 500 texts associated with livestock management from the late Neo-Babylonian/early Achaemenid period.²⁹

III. Prior Scholarship on Livestock Management at the Eanna

Mariano San Nicolò wrote his five-part series on animal management at Neo-Babylonian temples (“Materialien zur Viehwirtschaft in den neubabylonischen Tempeln” I-V) at a time when he did not have full access to resources (due to the aftermath of World War II) and it remains unfinished.³⁰ The incomplete fifth installment was published posthumously; the sixth, which was to serve as a summary, was never published. In this series, San Nicolò lays the groundwork for understanding the Neo-Babylonian temple’s animal economy. He classifies and discusses the various types of documentation and terminology, and he makes inroads towards understanding the political, social, and economic relationships among the personnel of both the Eanna and Ebabbar temples.

Although this dissertation builds on the foundation that San Nicolò laid, it is important to note that the series came out well before main aspects of the Neo-Babylonian economy had been explored in detail. For example, D. Cocquerillat’s

²⁹ Van Driel, “Eanna,” 78.

³⁰ “Materialien zur Viehwirtschaft in den neubabylonischen Tempeln,” I, *Or. NS* 17 (1948): 273-293; II, *Or. NS* 18 (1949): 288-306; III, *Or. NS* 20 (1951): 129-150; IV, *Or. NS* 23 (1954): 351-382; and a posthumously published V, *Or. NS* 25 (1956): 24-38. On the inaccessibility of resources, see *Or. NS* 17 (1948): 273ff.

exposition of the system of large-scale agricultural contracting at the Eanna has, in the past ten years, led scholars such as van Driel, Jursa, and Bongenaar to find similar contractual enterprises in other aspects of the temple economy.³¹ Also, the current renewed interest in the Ebabbar archive will lead to a reappraisal of almost every aspect of what is known so far about the Eanna material. In addition to his studies of temple agriculture, tithes, and associated entrepreneurs,³² Michael Jursa's articles for the Institute for the Study of Long-Term Economic Trends and the International Conference on Ancient Near Eastern Economics should almost be considered primers for future research on Neo-Babylonian temple archives.³³ In a very real sense, scholarship on the Neo-Babylonian temple economy is only now in its formative years.

What is more, San Nicolò organized his study around the documentation (“Materialien”) associated with livestock management ; insights into the management and utilization of livestock are found interspersed throughout his text annotations. One is able to profit greatly from the concerns and insight that San Nicolò’s approach permits, but it inherently forgoes comprehensive understanding. In turn, much of San Nicolò’s

³¹ Denise Cocquerillat, *Palmeraies et Cultures de l'Eanna d'Uruk*, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka, 8 (Berlin: Mann, 1969); van Driel, “Sheep and Goats”; Michael Jursa, *Die Landwirtschaft in Sippar in neubabylonischer Zeit*, Archiv für Orientforschung, Beiheft 25 (Vienna: Institut für Orientalistik der Universität Wien, 1995); A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997).

³² Respectively, Jursa, *Landwirtschaft*; Michael Jursa, *Der Tempelzehnt in Babylonien vom siebenten bis dritten Jahrhundert v. Chr.*, AOAT 254 (Münster: Ugarit Verlag, 1998); Michael Jursa, *Das Archiv des Bēl-rēmanni*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 86 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1999).

³³ Jursa, “Accounting,” and Michael Jursa, “Debts and Indebtedness in the Neo-Babylonian Period: Evidence from the Institutional Archives,” in *Debt and Economic Renewal in the Ancient Near East*, eds. Michael Hudson and Marc Van De Mieroop (Bethesda: CDL Press, 2002), 197-220.

extra-textual commentary on economic or administrative topics is derived from isolated texts, but the formal language of Babylonian economic texts often obscures fundamental information that is otherwise only exposed by context. Two examples follow.

First, the terminology of the documentary milieu for livestock management frames fundamental relationships in terms of creditor (the temple, either implicitly or represented by a person or persons) and debtor (temple personnel). Without context, the inclination is to base a line of inquiry on this apparent relationship, but the natural set of preliminary questions—e.g., how is the creditor to be repaid? what happens if the debtor defaults?—turns out to have little relevance to the actual relationship between the temple and its livestock personnel. Put into context, one finds that the relationship is not properly between creditor and debtor, but, more accurately, between employer and employee (for example, see here, Chapter Three, p. 50 n. 54). This should then lead to a different, or at least more nuanced, line of preliminary investigation. Yet the initial misinterpretation of the relationship immediately throws off other analyses that employ it as a basis for further investigation.

Second, San Nicolò often takes the terms of contracts and other legal documents at face value. Conversely, I have found that placing such texts within the economic system they in part describe may reveal that explicit contractual terms are infeasible and uneconomic in actual practice. For example, I argue that temple sheep breeding contracts are incompatible with basic animal husbandry.³⁴ In very general terms, the contracts call for offspring totaling two-thirds the number of ewes to be given to the temple every

³⁴ See here, Chapter Three, pp. 63f.

year.³⁵ This in itself is uneconomical at best. If indeed the temple extracted its share of the offspring every year (with the remainder left to the herdsman), then that herd's usefulness would last only as long as the original set of ewes continued to breed. In practice, basic livestock management demands that all the female offspring remain in the herd as productive capital, both to increase the size of the herd and to replace ewes as they become unproductive. There is indeed copious evidence to demonstrate that the temple's herdsmen actually managed their herds in this way. Thus, instead of being a blueprint for herd management, I argue that breeding contracts served only to sanction the method by which the temple calculated future assets from a herd. In this sense the breeding contracts had no practical relationship to actual day-to-day herd management.

Govert van Driel's "Neo-Babylonian Sheep and Goats" is an indispensable—if maddeningly incomplete—overview of sheep and goat management in first-millennium Babylonia. As is often the case with van Driel's work, it is full of insights and ideas that others expand upon to fill volumes (including the present one), but that remain unexplored in any detail as van Driel jumps between topics, subtopics, and tangents. For example, his division of temple livestock management into internal and external spheres is of paramount importance for this dissertation, but van Driel never gives it a full (or, for that matter, even partial) exposition. This is more a disappointment than a criticism: van Driel's clear thinking about these texts may not have been expressed in his expository writing, but he contemplates the texts and their milieu out loud so as to provoke further scholarship. This dissertation refers to his work frequently.

³⁵ The language is, in fact, very specific: *ana Bēlti ša Uruk inamdin* "he will give [the animals] to the Lady of Uruk;" compare the discussion of YOS 7 43 (here, pp. 59f.), which refers to the turning over of property to the Eanna as *x ana makkūr Eanna . . . inamdin*, "he will give x to the property of the Eanna."

IV. Sheep and Goat Terminology

The terminology for the different sexes and ages of sheep and goats at Uruk is straightforward and has been discussed in detail by Landsberger and van Driel.³⁶ I include a few observations on sheep terminology following Table 2.1. As goats were of passing interest for the Eanna, their broad categorizations remained more or less constant, yielding very little variation and discrepancy.

³⁶ Van Driel, “Sheep and Goats,” 229-233; Benno Landsberger, “Studien zu den Urkunden aus der Zeit des Ninurta-tukul-Aššur,” *AfO* 10 (1935/36): 152-159. For the early Ebabbar sheep and goat terminology, see da Riva, *Ebabbar*, 206 and 208f.

Table 2.1. Sheep and goat terminology

		Stud male	Male offspring	Fertile female	Female offspring
Sheep	Logogram	—	SILA ₄ /BAR.GAL	U ₈ (.Ù.TU)	BAR.MUNUS
	Akkadian	<i>puhālu</i>	<i>parru / kalūmu</i>	<i>lahru</i>	<i>parratu</i>
Goats	Logogram	MÁŠ.GAL	MÁŠ.TUR	ÙZ	MUNUS.ÁŠ.GAR
	Akkadian	<i>uriṣu</i>	<i>gadū^a</i>	<i>enzu</i>	<i>uniq<u>u</u></i>

^a See Gehlken, *Uruk I*, 20 for variants.

Collectives: The most common collective term for a group of miscellaneous and indeterminate sheep and goats is UDU.NITÁ, literally meaning “male sheep” but actually parallel in meaning to German *Kleinvieh*—for which some accept an English loan translation of “small cattle”—meaning both sheep and goats, of unspecified age and sex. Apparently Babylonian scribes were unsure of the reading of this logogram, as it takes both masculine and feminine verbal and adjectival concord.³⁷ As a masculine noun, it is apparently understood to mean *immeru*, a masculine word for “sheep,” whereas the feminine noun must be understood as *šēnu*, a word meaning “flock.” This latter word is also represented by the logogram U₈.UDU.ḪI.A. In general, U₈.UDU.ḪI.A/*šēnu* refers to a working herd of sheep and goats (i.e., primarily female animals), whereas UDU.NITÁ

³⁷ Masculine: YOS 3 87:17 UDU.NITÁ.ME . . . *ina āli mādu*?; YOS 3 147:18 UDU.NITÁ.ME *ša ina qāt nāqidī abkūnu*; feminine: YOS 7 8:25 56 UDU.NITÁ.MEŠ . . . *ina panišu amra* (also YOS 6 123:1f., YOS 17 86:5).

refers to sheep and goats grouped together for some other purpose (e.g., males collected for sacrifice, or considered as a group for other administrative purposes), but this is not a hard and fast rule. On *qabuttu* see here, Chapter Three, pp. 42f.

puhālu: This term denotes a ram, and it appears that rams were only kept in the herd for breeding purposes. This is reflected in the hapax legomenon found in GCCI 1 252:18, in which 7 male lambs (UDU.BAR.GAL) are given *ana UDU.puhālūti*, “for studding.” The absence of terminology for castrated rams in Uruk texts has been commented upon by many (and see below, *parru/kalūmu*).³⁸ Rams mostly appear in livestock inventory texts (see here, pp. 23ff.), so these would be rams of proven virility.

parru/kalūmu: Eanna texts use two words for male lambs: *parru* (UDU.BAR.GAL) and *kalūmu* (usually written UDU.*ka-lum*).³⁹ I assume that, at least at Uruk, the reading for UDU.SILA₄ is *parru* as well, although the syllabic writing for *puhādu* (the generic word for “sacrificial lamb”) does occur in a few Eanna texts.⁴⁰ Livestock inventory texts from the earlier Neo-Babylonian period use *parru* as the general word for male lambs, whereas texts of the same type from the latter part of that period—after Nebuchadnezzar II year 30—use *kalūmu*. These two words also appear together to describe different types of

³⁸ Van Driel, “Sheep and Goats,” 238; Fritz Rudolph Kraus, *Staatliche Viehhaltung im altbabylonischen Lande Larsa*, Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, Nieuwe Reeks, Deel 29, no. 5 (Amsterdam: N. V. Noord-Hollandsche Uitgevers Maatschappij, 1966), 26 note 1; Landsberger, “Studien,” 154f.; Gehlen, *Uruk I*, 22f.

³⁹ Against the lexical evidence, some suggest a reading of UDU.BAR.GAL as *p/bargallu*, based on the quasi-syllabic writing UDU.*par-gal*—see van Driel, “Sheep and Goats,” 231 and Michael Jursa, “Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery,” *Iraq* 59 (1997): nr. 2 (p. 100f.) note 1.

⁴⁰ E.g., YOS 17 321:1.

male lambs extracted from the same herd.⁴¹ When the two appear together as extractions from the herd, *kalūmus* usually far outnumber *parrus*. When they appear together in livestock inventory texts, and in NBC 4897, *kalūmu* refers to male lambs in the herd, and *parru* to males extracted from it. The Murašû and Aršam livestock texts also list two categories of male lambs: the Murašû texts use *parru* (written *par-ri*) and SILA₄ (= *puhādu*[?]); the Aršam texts use UDU.NITÁ MU 2-ú (yearling) and UDU.NITÁ TUR.MU.AN.NA (under one year of age).⁴² Given that these texts all differentiate between two groups of young male animals (and not young females), one should immediately suspect that the older of these groups consisted of castrated males, as uncastrated post-pubescent males would have been difficult to control. I am, however, unable to substantiate this suspicion with the available evidence. At Uruk, it is generally assumed that *parrus* are older than *kalūmus*,⁴³ in which case then they would be the likely choice for castrated males, but this is explicitly contradicted by GCCI 1 252 (see above, under *puhālu*). More information is needed here.

laḫru: As van Driel notes,⁴⁴ the terminology for ewes changes during the period of the Eanna archive under consideration. Earlier texts (roughly those through the reign of Nebuchadnezzar II) by and large refer to ewes as U₈ Ù.TU.ME, “fertile ewes,”⁴⁵ or as

⁴¹ E.g., YOS 7 143:1(!), 19(!); YOS 7 74:23f.; GCCI 1 400:3, 15; VAS 20 115:3; Gehlken, *Uruk* II no. 163; TCL 13 171:1.

⁴² Translations follow van Driel, “Sheep and Goats,” 230.

⁴³ Van Driel, “Sheep and Goats,” 231.

⁴⁴ “Sheep and Goats,” 232.

⁴⁵ Or U₈ Ù.TU UDU.NITÁ.ME (Sack, *Cuneiform Documents*, 40:2), U₈ AMA.ME (AnOr 8 5:1, TCL 12 44:1).

$U_8.GAL.ME$, “large ewes,” whereas later texts (those after Nebuchadnezzar II) by and large simply use U_8 . The break between them is not clean, and earlier terminology is found in later texts. Ewes only remained in the herd if they were fertile. It appears that infertile ewes were called $U_8.SAL.MAH_x$ (the last element is at times transcribed $.MÁH$ or $.AL$), the Akkadian for which is not known.

parratu: The writing for female lamb changes as well over time, having the same rough chronological break as the writing for ewe. The writing is often found in earlier texts logographically ($UDU.BAR.MUNUS.MEŠ$) and quasi-syllabically in later texts (usually written *par-rat*), but again without a clean chronological break. A *parratu* is a female lamb, and one must assume that after one year—i.e., in the subsequent lambing season—all female lambs were classified as ewes.

CHAPTER THREE

THE EXTERNAL LIVESTOCK MANAGEMENT OF THE EANNA OF URUK

I. Introduction

This chapter examines in detail the external livestock management of the Eanna of Uruk, expanding upon van Driel’s division of the Eanna’s livestock management into external and internal sections. After the introduction (I), I then discuss the *nāqidus*, which I translate “herdsman,” who contracted directly with the Eanna for herds and took responsibility for rearing and raising the animals (II). The herdsmen also had shepherds in their employ, but very little is known about them. This section leads to a detailed discussion of the central issue of *rēhu* (II.A), a word that is commonly translated “arrears.” I take issue with that interpretation and argue that *rēhu* in fact is best translated “balance.” I then discuss *rēhu* in terms of fluctuating balances (II.B), increasing balances (II.C), decreasing balances (II.D), and, finally, the commutation of balances (II.E). Then (III) I consider the *rab būlis*—“chiefs of the herds”—who oversaw and commanded the herdsmen, the group from which they were promoted. Finally (IV) I discuss the short-lived office of the *ša muhhi rēhāni*—lit. “the one in charge of balances”—reevaluating the evidence for the impeachment of the infamous Gimillu in terms of my new assessments of *rēhu* and the nature of his position as *ša muhhi rēhāni*.

The external and internal managements stood in separate formal/juridical and functional relationships to the Eanna, and this manifests itself in a variety of ways, as is discussed in detail here, Chapter One, pp. 7ff. Formally, the herdsmen do not appear on the temple's ration lists as livestock managers, whereas personnel of the internal management do. Moreover, the external management appears mostly in legal texts, whereas the internal management appears almost exclusively in administrative receipts and notes. Functionally, the internal and external managements worked together, in that the external management raised animals in order to deliver them to the internal management, which then took responsibility for preparing the animals for ritual sacrifice.

II. The Herdsmen

YOS 6 155, a herding contract between the Eanna and one of its herdsmen,¹ spells out the economic relationship between them. The Eanna's chief administrator (the *šatammu*) and the temple scribes, upon the command of Belshazzar the crown prince, grant to the herdsman Nanā-aha-iddin (lines 1-4) 37 rams, 150 male lambs, 1065 ewes, 590 female lambs, 7 he-goats, 45 young he-goats, 83 she-goats, and 73 young she-goats, all of which are called the "property of the Lady of Uruk and Nanā." The terms of the contract, which parallel those of the Aršam contracts,² are that every year the herdsman will give to the Lady of Uruk (*ana Bēlti ša Uruk inamdin*):

¹ YOS 6 155 is edited by Sibylle von Bolla, *Untersuchungen zur Tiermiete und Viehpacht im Altertum*, 2nd Edition, Münchener Beiträge zur Papyrusforschung und antiken Rechtsgeschichte, 30 (Munich: C.H. Beck, 1969), 125ff. See also Govert van Driel, "Neo-Babylonian Sheep and Goats," *Bulletin on Sumerian Agriculture* 7 (1993): 223.

² The nine Aršam contracts were found together with the Murašû archive (see Matthew Stolper, *Entrepreneurs and Empire*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 54 [Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1985], 23), and are leases of large herds of sheep and goats belonging to the Achaemenid prince and satrap of Egypt Aršam (Arsames) to

- For every 100 ewes capable of bearing young, 66 2/3(!) male and female lambs.
- For every 100 she-goats, 66 2/3(!)³ young male and female goats.
- For every ram and ewe, 1 1/2 mina of wool.
- For every he- and she-goat, 5/6 mina of goat hair.

The temple also allowed for a ten percent death rate in the herd every year. Van Driel infers from this contract that the herdsmen profited from the relationship with the Eanna by keeping any lambs, kids, and fiber over the stipulated amount (on this, see here, pp. 47ff.). He therefore argues that the herdsmen were entrepreneurs who drew their primary income from the Eanna's herds; the fact that the herdsmen do not appear on the Eanna's ration lists strengthens this argument.⁴ One should not, however, assume that the herding contract alone bound the herdsmen to the Eanna, as some herdsmen are also called the temple slaves (*širkus*) of Ištar.⁵ Furthermore, some herdsmen contracted out their animals, and also took animals from others on contract.⁶ The herdsmen had shepherds in their employ to tend to the animals.⁷

Enlil-suppē-muḫur, a one-time subordinate of the Murašū family. See Julius Augapfel, *Babylonische Rechtsurkunden aus der Regierungszeit Artaxerxes I und Darius II*, Kaiserliche Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse, Denkschriften 59 Band 3 (Vienna: Buchhändler der Kaiserliche Akademie der Wissenschaften in Wien, 1917), 82-85, and van Driel, "Sheep and Goats," 222f.

³ In lines 11 and 12 the text actually reads 66 5/6, although two-thirds is clearly meant.

⁴ Van Driel, "Sheep and Goats," 223f., and here, Chapter One, pp. 7ff. Earlier, Mariano San Nicolò ("Materialien zur Viehwirtschaft in den neubabylonischen Tempeln I," *Or. NS* 17 [1948]: 291) specifically argued against the notion that the herdsmen were entrepreneurs. He based his argument less on empirical evidence than on his general understanding of the relationship between the temple and its personnel. He also claims that the herdsmen drew rations and prebendary income, but provides no textual reference. This notwithstanding, he was certainly correct to emphasize that the herdsmen were *širkus* of the Lady of Uruk.

⁵ See, e.g., AnOr 8 61:1-6, which mentions herdsmen of cattle. See also here, p. 111 note 118.

⁶ See, e.g., TCL 12 119, YOS 6 123, YOS 7 140, Dillard NB Lewis Coll.: FLP 1584, and Spar, *Studies* no. 2.

⁷ There is in fact very little information on shepherds (*rē ՚u*, pl. *rē ՚uṭu*) as such. They often appear in texts associated with the theft of temple animals, either as witnesses to a theft, or defending themselves

As share-breeders, the herdsmen tended concurrently to the temple's animals, their private herds, and perhaps another person's animals on contract. The temple branded the animals that belonged to it with a star (the symbol of Ištar) or another symbol, and the branded animals in a herd were referred to as the *qabuttu ša Eanna* (or DN). *qabuttu* (also *qabû*), usually understood to mean "corral"—in other words, the physical holding place for the livestock—also had the transferred meaning of "flock" or "herd." The word is analogous to English "fold," meaning both the enclosure and metonymically the animals themselves. San Nicolò noted this dual meaning,⁸ but the expanded meaning was not incorporated into later literature.⁹ Compare, for example, YOS 6 26:1-6:

[*Iqīšā*] *apilšu ša Nanā-ēreš nāqidu ša Bē*[*lti ša Uruk*] *ana Nabû-šarra-uṣur ša rēš*
šarri u bēl[*ī piqitti*] *Eanna iqbi umma 2000 sēnu 500*[*+x ÁB.GAL.MEŠ ina(?)*]
qabutti ša Bēlti ša Uruk ina panija maš-kat-[tum] *ša Bēlti ša Uruk ina panija jānu*
sēnija u ÁB.GAL.MEŠ-ia ina sēri us-sak-ka-pa-[*?*]

Iqīšā/Nanā-ēreš, the herdsman of the Lady of Uruk spoke to Nabû-šarra-uṣur the courtier and to the supervisors of the Eanna as follows, "2000 sheep and goats and 500[+x (number of) cattle] are from(?) the fold (*qabuttu*) of the Lady of Uruk under my control, but there is no *maškattu*¹⁰ of the Lady of Uruk at my disposal. My sheep, goats, and cattle are . . . in the steppe."¹¹

against accusations of misappropriation. Shepherds are most often described as "of" (*ša*) a particular herdsman. One text (YOS 7 189:1f.) describes a shepherd as *ša qāti* "under the control of" a herd supervisor.

⁸ See Mariano San Nicolò, "Parerga Babyloniaca IX," *ArOr* 5 (1933): 68.

⁹ With the notable exceptions of von Bolla (see *Viehpacht*, 128 n. 1) and Rocío da Riva, *Der Ebabbar-Tempel von Sippar in frühneubabylonischer Zeit*, AOAT 291 (Münster: Ugarit Verlag, 2002).

¹⁰ The meaning of *maškattu* here is elusive. YOS 6 26:9 later makes clear that the ability to raise livestock (*bullu*) depended upon having a *maškattu*. When the royal representative of the Eanna granted him arable land (SE.NUMUN) to raise his livestock (lines 13ff.), the purport of the text is that he gave him a *maškattu*. There is a well-attested Neo-Babylonian word *maškattu* meaning "storehouse," but in YOS 6 26 the equation between an arable field and a *maškattu* would appear to rule this out; in fact the meaning would be quite the opposite, something like "a place to graze." The word occurs again in association with livestock in YOS 7 55:4ff., in which the herdsman Zababa-ēreš makes the following statement to upper-level temple administrators: UD 22 *ša Addaru MU.5.KAM Marduk-šarra-uṣur/Zabdiya rē ūti ša sēni ša Bēlti ša Uruk iqtiri(! text -ir) u sēnū ultu maš-kat-tum ša Bēlti ša Uruk iktatam*, "on the twenty-second day of month XII (Addaru), the fifth year (of Cyrus), Marduk-šarra-uṣur/Zabdiya beat(!) the shepherds of

Thus the *qabuttu* here is a collective term designating animals that belonged to the temple but were under the direct control of a herdsman; it is used, it appears, in opposition to a term for a place to put them. The complete expression *qabuttu ša DN ša ina pan PN nāqidi*, “the fold of DN, under the control of the herdsman PN,” or the even more precise *qabut makkūr DN ina panišu* (YOS 7 146:2), “the fold of the assets of DN under his (*scil.* the herdsman’s) control,” captures the relationship between the external management and the Eanna, in that livestock belong to the temple but are managed by a herdsman. The common expressions *qabuttu ša PN* and livestock described as *ina pan PN* should both be understood as abbreviations of the longer phrase. One finds *qabuttu* most often in texts dealing with the theft of temple animals, in which a herdsman or his shepherd describes the pilfering of the Eanna’s animals under his control. In the published Eanna texts *qabuttu* is only used in association with the external livestock management; it never, for example, describes the animals under the control of an offering shepherd.

In YOS 6 155, the initial herd consisted of 1655 female and 187 male sheep; thus males made up just over ten percent of the herd at its legal inception.¹² Unlike the Aršam contracts, YOS 6 155 has no stipulations about dairy products.¹³ Until there is evidence

sheep and goats of the Lady of Uruk and illegally appropriated sheep and goats from the *maškattu* of the Lady of Uruk.” The text later states (in an unclear context, line 22) *maš-kat-tum ša Bēlti ša Uruk ši*, “that is the *maškattu* of the Lady of Uruk.” In view of these references, it is thus likely that *maškattu* had both the concrete meaning of “storehouse” and the general meaning of “place to put (things).”

¹¹ CAD S 74a (*s.v. sakāpu*) translates “have to be driven out into the steppe (for pasture).” This seems highly unlikely. The verb *sakāpu* is used with cattle in only one other reference, and that is a literary text (Ištar and Dumuzi). See also Mariano San Nicolò, “Viehwirtschaft I,” 281f. This part of the text remains unclear.

¹² For further discussion of herd sex ratios, see here, pp. 65f.

¹³ The Aršam contracts call for a yearly payment of 100 *gubnātu* (“cheeses”) per 100 ewes and 100 *qâ* of ghee (clarified butter) per 100 ewes that have lambed. It is impossible to gauge at present whether the demand for these dairy products would have placed any real burden on the herdsmen, as dairy is almost

to the contrary, I assume that herdsmen benefited from the sale or trade of milk and cheese. Although one does not expect to find short-lived milk in the textual record, it is surprising that references to cheese, yogurt, or butter are not found with any regularity in the contemporaneous temple archives.¹⁴ It is unclear to me whether the herdsmen profited from the wool of the Eanna's animals.

NBC 4897, a text that has been the subject of much discussion, appears to chart the decade-long maturation of one of the Eanna's herds.¹⁵ The herd of sheep and goats, called the “property of the Lady of Uruk and Nanā,” was, it seems, entrusted to a herdsman named Nabû-ahhē-šullim.¹⁶ What is striking about this text is that it conforms exactly to the terms of YOS 6 155: the number of lambs reported in any given year nears two-thirds of the number of viable ewes reported for the previous year. For example, line

totally absent from the textual records of this time. Richard Redding, “Decision Making in Subsistence Herding of Sheep and Goats in the Middle East” (Ph.D. diss., University of Michigan, 1981), 108, from a variety of sources, postulates that an average ewe produced 45.0 kg of milk per year in excess of lambing requirements.

¹⁴ Milk was certainly used in temple ritual during this period—see YOS 7 79 (and Mariano San Nicolò, “Viehwirtschaft IV,” 352f.). Milk and dairy products are found in Ur III archives, see Ignace Gelb, “Growth of a Herd of Cattle in Ten Years,” *JCS* 21 (1967): 64-69 and Tohru Gomi, “On Dairy Productivity at Ur in the Late Ur III Period,” *JESHO* 23 (1980): 1-42.

¹⁵ First published by Ronald Sack, “Some Notes on Bookkeeping in Eanna,” in *Studies in Honor of Tom B. Jones*, eds. M. A. Powell and Ronald H. Sack, AOAT 203 (Kevelaer: Butzon and Bercker; Neukirchen-Vluyn: Neukirchener Verlag, 1979), 111-118. Van Driel discusses the text at length in “Sheep and Goats,” 233-235, and he and Karen Nemet-Nejat reedited the text in “Bookkeeping Practices for an Institutional Herd at Eanna,” *JCS* 46 (1994): 47-58. The text has again been reedited, with the prior work taken into consideration, by Stefan Zawadzki, “Bookkeeping Practices at the Eanna Temple in Uruk in the Light of the Text NBC 4897,” *JCS* 55 (2003): 99-123.

¹⁶ The relationship between Nabû-ahhē-šullim and the animals is never specified. The end of the first line of the text reads in part: *naphar* 137 (*scil. UDU.NITĀ*) *Nabû-ahhē-šullim* MU.37.KAM. Given that this is the only personal name in the text (excepting the temple administrators at the end), it seems reasonable to suppose that Nabû-ahhē-šullim controlled this herd. The problem with this lies in the summary of the text, which reads in part: *nikkassū epšūtu ša Enlil-šarra-usur qīpi ša Eanna u Zērija šatam Eanna itti nāqidī* (LÚ.NA.GADA.ME) *ipušū*, “the settled accounts which Enlil-šarra-usur the Resident of the Eanna and Zērija the chief administrator of the Eanna did with the herdsmen.” That is, it refers to herdsmen and accounts, plural. Henceforth I will refer to the herdsman of this text, but it is possible that the herd as inspected belonged to a group of herdsmen.

17 records a total of 91 lambs for the fortieth(!) year of Nebuchadnezzar II, and the previous year gives a total of 137 viable ewes.¹⁷ Ninety-one is almost exactly two-thirds of 137. Such calculations work for every entry, with slight variations.¹⁸ Hides (i.e., losses) in fact are also booked in terms that agree with YOS 6 155. The text gives yearly calculations of hides for every entry of rams, ewes, and female lambs. They never exceed, and are always close to, ten percent of the total if the number of live animals is rounded up or down to the nearest ten. Line 14 records a total of 54 rams, 158 ewes, and 53 female lambs; line 15, accordingly, records 5 ram hides, 16 ewe hides, and 5 female lamb hides. It is exceedingly unlikely that ten percent of every category of animal died each year. Instead, it appears that the temple routinely deducted ten percent of the yearly total. Whereas the Aršam contracts specify that the herdsman had to provide the hide (1-*en* KUŠ.HI.A) and 2 1/2 shekels of sinew (*gīdu*) to verify the death of an animal, YOS 6 155 records no such stipulation. In fact, YOS 5 155 makes no mentions of hides, and they are rarely mentioned in other texts associated with the external management.¹⁹

Perhaps the most informative aspect of NBC 4897 is that the female offspring were not divided equally between the herdsman and the Eanna. That is, the total number of female lambs booked per year as the property of the Eanna always significantly outnumbers the total number of male lambs. For example, line 5 records a total of 88

¹⁷ The text gives a total of 158 ewes for the year. One then deducts the hides, here 16, and the wages, here 5, for the total of 137.

¹⁸ The arithmetic in this text is often inaccurate (see Zawadzki, "Bookkeeping Practices," 102f.), which may account for the slight variations.

¹⁹ Exceptionally, YOS 7 138:4 obligates a herd supervisor to deliver 1000 tanned sheep-skins and fine leather straps to the Eanna.

viable ewes for that year,²⁰ which calls for a claim of 58 or 59 offspring—two-thirds of 88—in the following year. A total of 58 is given (line 8), but it divides into 18 male and 40 female lambs. Throughout this text, female lambs constitute about two-thirds of the total lambs booked as the Eanna's property per year. In this example, 40 nears the upper limit for the total possible number of female lambs born to 88 ewes. If we postulate a lambing rate of 100% for viable ewes—that is, that the number of lambs born each year equals the numbers of ewes—one expects around 44 female lambs for 88 ewes. If we postulate a more reasonable 75-80% lambing rate (as in Old Babylonian Larsa and Nuzi)²¹ one expects around 33-35 female lambs for 88 ewes. There is no evidence to suggest that male/female ratios varied widely from year to year in herds of sheep.²² Therefore, in the following table (Table 3.1) I list the number of viable (and total) ewes recorded for each year (before the addition of *irbu* animals to the herd, line 27), the total number of female lambs attributed to those ewes, and the estimated total number of female lambs at lambing rates of 100% and 80%.

²⁰ That is, the 101 ewes listed, less the 10 hides and 3 wages.

²¹ For Nuzi see Martha Morrison, "Evidence for Herdsmen and Animal Husbandry in the Nuzi Documents," in *Studies on the Civilization and Culture of Nuzi and the Hurrians in Honor of Ernest R. Lacheman*, eds. M. A. Morrison and D. I. Owen (Winona Lake: Eisenbrauns), 257-296. For OB Larsa see J. N. Postgate (with a contribution by S. Payne), "Some Old Babylonian Shepherds and Their Flocks," *JSS* 20 (1975): 1-21, and Fritz Kraus, *Staatliche Viehhaltung im altbabylonischen Lande Larsa*, Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, Nieuwe Reeks, Deel 29, no. 5 (Amsterdam: N. V. Noord-Hollandsche Uitgevers Maatschappij, 1966), 49. See also my remarks here, Chapter Six, p. 249f.

²² See Gudrun Dahl and Anders Hjort, *Having Herds: Pastoral Herd Growth and Household Economy* (Stockholm: Dept. of Social Anthropology, University of Stockholm, 1976) section 4.1.1.

Table 3.1: Ewes and female lambs in NBC 4897

Line	Viable ewes (total ewes)	Female lambs claimed as property	Approximate number of female lambs at 100% lambing rate of viable ewes and of (total ewes)	Approximate number of female lambs at 80% lambing rate of viable ewes and of (total ewes)
5	88 (101)	40	44 (51)	35 (40)
8	104 (119)	45	52 (60)	42 (48)
11	120 (138)	53	60 (69)	48 (55)
14	137 (158)	60	69 (79)	54 (63)
17	159 (182)	65	80 (91)	64 (73)
20	182 (209)	80	91 (105)	73 (84)
23	207 (237)	90	104 (119)	83 (95)

Note: The line number refers to the line in which the number of ewes of a particular year is recorded; the number of lambs born to those ewes appears in the record of the following year.

The number of female lambs claimed as property here always falls between the estimated 100% and 80% lambing rates of viable ewes, and it is just below the estimated 80% lambing rate for the total ewes. With this information, one must infer that from year to year this text accounts for all the female lambs born to the herd—that, in effect, no female lambs were kept off the books. Therefore, it also seems reasonable to conclude that the Eanna claimed all of the female lambs as its property, less those deducted as wages and hides.

Thus, if the temple claims all the females, and the number of recorded male lambs is always significantly less than the number of female lambs, what happens to the unrecorded male part of the increase? According to van Driel, those animals became the

private property of the herdsman. The problem with the practical application of that idea to this text, as we have seen, is that the herdsman's private herd would consist entirely of male animals.²³ One might assume that the herdsman sold off the male lambs from year to year (as do most livestock owners), essentially using the Eanna's ewes to produce a personal cash crop. Yet if this were the case, then the herd would have failed to accomplish one of its primary objectives, which was to create male lambs for sacrificial offerings (see here, pp. 64ff.).²⁴ If we assume the Eanna claimed for sacrifice the male lambs missing from the yearly inspections in this text, it would then imply that the Eanna claimed *all* the yearly increase in animals: two-thirds as its live property, and one-third as sacrificial animals. This would leave very little for the herdsman in terms of his share-breeding arrangement.

One finds an added complication—yet ultimately a solution—to this dilemma in lines 34-36 of this text. Line 34 gives the size of the herd in the final year of reckoning, line 35 begins *ina libbi*, “from which,” and then lists a significantly smaller set of animals that are inspected (*amru*), and line 36 accounts for the difference between the two lines,

²³ The only exception to this would be the yearly deduction from the temple's share of the animals called wages (*idū*). Over the course of time covered by the text, the Eanna withdrew 58 ewes, 36 female lambs, 23 rams, and 4 female kids as wages. The fact that the wages consist mostly of female animals implies that the temple did not remove the animals from the herd for meat or fiber. Wages in animals in association with livestock management perhaps appear in three other texts (Harold Stigers, “Neo- and Late Babylonian Business Documents,” *JCS* 28 [1976]: no. 4 [p. 25]:9; VAS 20 115:14'; and 116:12'), but the texts are fragmentary and I cannot pull any meaningful information out of them.

²⁴ In YOS 7 143:24(!), the Eanna received animals from the herdsmen *ina gizzi*, “at shearing time.” (see here, Chapter Four, pp. 146ff.) In NBC 4897, entries for each year deduct a small number of *parru* male lambs at shearing time as well. Given that these deductions are very small—the most being eight (line 34, emended)—and that they do not increase over time, it is highly unlikely that these are deducted for offerings. Zawadzki conjectures that they are a “payment for shearing” (“Bookkeeping Practices,” 114f.).

which is called the *rēhu*.²⁵ These are the hallmarks of a “balanced account” type text, so the numbers up to line 34 should mark “debits” (i.e., those animals for which the herdsman is administratively responsible) and line 35 should mark “credits” (i.e., those animals from the first group for which the herdsman can prove a discharged or continuing obligation).²⁶

Yet what do these numbers correspond to? As I see it, line 34 gives the projected size of the herd, line 35 gives the actual size of the herd, and line 36 accounts for the difference. I believe line 34 is the projected size of the herd because the total there derives from cumulative totals of fixed calculations of offspring, less fixed calculations of herd mortality, which cannot in any way reflect the actual development of the herd.²⁷

²⁵ Note that the eleven extracted male lambs mentioned in the “total” box in line 34 are subtracted from the “total” number of rams. That is, the number of projected rams (209) less the number of inspected rams (5) and less the number of extracted male lambs in line 34 (11) gives the *rēhu* of 193. Correspondingly, the eleven extracted lambs must also be subtracted from the “total” number of sheep to render the correct *rēhu*. The mention of *rēhānu* at the end of the text (line 39, just before the upper edge) is problematic. As Zawadzki notes (“Bookkeeping Practices,” 108f.) lines 36ff. give the total amount of wool mentioned in the text. In my opinion it is only these totals that are described as *ša la rēhān[i ...]* (Zawadzki suggests that it refers to animals). Although this is a topic for a volume in itself, it strikes me that wool does not physically carry over from one year to the next—it is either collected or uncollected each year, and would thus be subject to accounting measures similar to those for agricultural products. It is possible that the text is recording the difference between the amount due from the herdsman and the amount actually paid (see BIN 1 176, here, pp. 71f.).

²⁶ Michael Jursa, “Accounting in Neo-Babylonian Institutional Archives: Structure, Usage, and Implications,” in *Creating Economic Order: Record-keeping, Standardization, and Development of Accounting in the Ancient Near East*, eds. Michael Hudson and Cornelia Wunsch (Bethesda: CDL Press, 2000), 158 refers to NBC 4897 as the paradigmatic example of the “tabulated account” version of the balanced account.

²⁷ In parallel, see the later discussion of a text published by Ignace Gelb, (“Growth of a Herd of Cattle in Ten Years.” *JCS* 21 [1967]: 64-69) in Hans Nissen, Peter Damerow, and Robert Englund, *Archaic Bookkeeping* (Chicago: University of Chicago Press, 1991), 97-102 and Mario Liverani and Wolfgang Heimpel, “Observations on Livestock Management in Babylonia,” *Acta Sumerologica* 19 (1995): 126-134. Liverani sums up the new understanding of Gelb’s text as follows (pp. 128f.):

“the ‘unrealistic’ regularities in the text were due to the very system of administrative recording of a commodity (the cattle) which was not under direct control: so the text says not what really happened, but what the administration pretended to happen ... [t]he herd having been entrusted to stock-breeders, remaining outside the permanent and direct inspection by the administration,

Put another way, it is just as impossible that the herd reproduced at a fixed rate every year as it is impossible that ten percent of every category of animal, except male lambs, died every year. The fact that the temple is using fixed calculations to determine the number of offspring, that death deductions are fixed, consistent, and unverified, and that these fixed calculations conform exactly to the stipulations of known herding contracts, detaches the numbers in line 34, and the numbers on which line 34 is based, from any connection to the actual development and constitution of the herd.²⁸

Thus, the numbers leading up to line 34 retroactively calculate the Eanna's share of a herd over a period of ten years (deriving from the original set of animals, line 2). The actual size of the herd after ten years is given in line 35. This is confirmed by the fact that these latter animals are inspected (*amru*), setting them apart from the previous totals of animals. I think that taking the difference between lines 34 and 35 to be the difference between inspected and uninspected animals belies the function of a balanced account.²⁹ That is, a balanced account attempts to validate and justify one independently calculated set of numbers in terms of another. Generally speaking, this takes the form of debits versus credits.³⁰ The difference between inspected and uninspected parts of a herd is essentially arbitrary. Such an approach assumes that the text is recording a mixture of

this (or a similar) kind of calculation is the only one to be easily applied ... [t]he administration pretends such a growth, and the breeders have to manage as they can in order to satisfy the administration and probably also get some personal advantage in addition."

²⁸ Excepting, of course, small deductions for wages (*idū*) and those few animals taken *ina gizzi*, "at shearing time" (see here, p. 48 note 24). As these are taken out of the temple's share of the herd, and do not conform to a set pattern, it is possible that the Eanna is subtracting real extractions—verified by texts—from projected numbers to determine its share. Moreover, the real augmentation of the herd with *irbu* animals (line 27) certainly increased both the projected and actual size of the herd.

²⁹ E.g., Zawadzki, "Bookkeeping Practices," 119.

³⁰ See, for example, YOS 7 8, here, Chapter Four, pp. 137ff.; YOS 7 143, here, Chapter Four, pp. 147ff.

actual animals less calculated deductions (deaths) and that this is somehow confirmed by an inspection of part of the herd (although, presumably, the full herd had been inspected over and over again to obtain the yearly totals). Instead, I am arguing that the Eanna justified projected herd size in terms of actual herd size. Whether or not a significant difference between the two was actionable is another matter.

Returning to the question of the male composition of the herd, the *actual* herd gives ratios of only 5 rams to 138 ewes (1:28), and 14 male lambs to 41 female, which are significantly lower proportions of males to females than the preceding projected totals.³¹ Yet, given my new characterization of the text, this line of inquiry—i.e., how to account for the missing male lambs in NBC 4897—is no longer relevant as such. The text does not credit the herdsman for major deductions of male lambs, whereas minor deductions appear throughout. We shall explore in more detail the difference between projected totals and the actual use of male lambs in the following section.

In NBC 4897 *rēhu* is the difference between the projected total of the herd and the actual number of animals found upon inspection. The use of *rēhu* to control animal inventory is the most distinguishing characteristic of texts associated with herdsmen from the Neo-Babylonian and early Achaemenid periods, but I believe with a slightly different connotation from that in NBC 4897.

³¹ Compare as well the original set of sheep, which is 7 rams to 90 ewes (1:13), line 2, and here, Chapter Three, pp. 65f.

II.A. *rēhu*

By contracting out its herds, the Eanna delegated the bulk of responsibility for rearing its livestock to the herdsmen. As a result, one finds very little information about the day-to-day management of these animals in Eanna texts. Yet for our immediate purposes this information is irrelevant (indeed, the Eanna contracted out its animals in order to make it irrelevant). The primary responsibility of the herdsmen was to deliver animals and animal fiber to the temple. The main link between the external and internal systems of livestock management was the transfer of the young male animals from the external to the internal managers; the latter then prepared the animals for sacrifice. Most of the evidence for this transfer must be gleaned from incidental information in texts that did not directly result from the transfer of animals. The Eanna's system of share-breeding did not give rise to a regular set of legal texts, such as promissory notes and receipts, as are found with contemporary systems of agricultural management.³² In Chapter Four (pp. 147ff.), I use a variety of text types to discern that the Eanna divided animals transferred from the external to the internal management between the *bīt urī* and the offering shepherd, also using a few animals directly in offerings. Yet when texts associated with the external management mention the delivery of livestock to the temple,

³² On the administrative texts associated with livestock management at the Eanna see here, Chapter One, pp. 16ff. Exceptionally, the letter YOS 3 16 mentions a delivery of sheep according to a promissory note (*u'iltu*) drawn up to the writer's debit. He politely requests the Eanna's chief administrator (Nabū-mukīn-zēri) to send the promissory note back to him after the completion of the delivery of animals. The writer's name (*mil-te-ri-za-bad*) does not appear in the known lists of herdsmen, so it is possible that the animals were brought in from outside the temple. See also here, pp. 52f.

the location of delivery remains ambiguous. Some texts mention delivery to the Eanna³³ or the Lady of Uruk herself,³⁴ while others specify delivery to the chief administrator (the *šatammu*) and/or the royal supervisor of the Eanna (the *ša rēš šarri bēl piqitti Eanna*).³⁵ Others say that a herdsman “will bring in and give” (*abākuma nadānu*), without any indication of a location or responsible official.³⁶ Moreover, there is no definite word for the herdsman’s payments to the Eanna. Texts say “he will give/he gave (*nadānu*)” or “he will pay/ he paid (*eṭēru*)” some amount of sheep and/or wool, but never qualify these payments as “his rent” or “his share” or the like.

In general, one should not expect to find legal receipts for animals paid, as those texts would presumably belong to the contractor (as would, for example, receipts for crops paid in contemporary systems of agricultural exploitation). When the contractor returned these receipts to the temple for an audit, they were presumably then destroyed.³⁷ It seems unusual that there are no individual assessments of payable animals, as, for example, one finds in the common *imittu* contracts associated with temple date orchards and arable land,³⁸ yet this might be explained by the difference between the capital and products of date farming and those of animal husbandry. Dates (and other agricultural

³³ E.g., YOS 7 127:8f.

³⁴ E.g., YOS 6 155:15f.

³⁵ E.g., GCCI 2 120:9ff.

³⁶ E.g., YOS 7 160:8ff.

³⁷ See the possible exception with the texts associated with one Isinaja/Dannu-Nergal, here, Chapter Four, pp. 157ff.

³⁸ See Denise Cocquerillat, *Palmeraies et Cultures de l’Eanna d’Uruk*, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka, 8 (Berlin: Mann, 1969), 12, and Michael Jursa, *Die Landwirtschaft in Sippar in neubabylonischer Zeit*, Archiv für Orientforschung, Beiheft 25 (Vienna: Institut für Orientalistik der Universität Wien, 1995), 147ff., 160ff.

products) are easily movable and storable, and thus could be held at a central location or outpost. The drawing up of a crop estimation, therefore, would be a way for the Eanna to predict intake and ready storage. However, the Eanna had limited capacity to keep live animals on site, therefore it stored animals “on the hoof” with its herdsmen. Thus the projection of herd size would not be found in a text requiring delivery of animals, but instead in a reassessment of the number of animals stored on the hoof with the herd managers.

Texts often describe the herdsmen as *ša rēḥ(ān)i*, or associate them with *rēḥu* in other ways. *Rēḥu*—from the root *rīḥ* meaning “to remain, be left over”—means “remainder” and is thus generally taken to mean “outstanding balance, arrears.” Treatment of *rēḥu* in association with livestock management is scanty. CAD R translates *rēḥu* as “outstanding obligation, outstanding delivery;” van Driel does not translate the word, but refers to it in terms of “reneging,” “backlogs,” and “debts.”³⁹ San Nicolò postulates that *rēḥu* is the word for the total annual amount due the temple in animals and wool (he always translates it as “Rest(e)” in quotation marks):

Der auf Grund der jährlichen Abrechnung bei dem einzelnen Viehhalter festgestellte Bestand beziehungsweise sein Soll an abzuliefernden Tieren und bei den Kleinviehzüchtern auch an Wolle wird als ‘Rest’ (*rēḥu*) ‘zu seiner Verfügung’ (*ina panišu*, d.h., zu seinen Lasten) gebucht und ist je nach den Umständen oder nach Weisung entweder auf neue Rechnung übertragen oder abgeführt worden.⁴⁰

³⁹ “Sheep and Goats,” *passim*.

⁴⁰ “Viehwirtschaft IV,” 361.

Rēhu is often described in the texts as of a particular year,⁴¹ or of a set of consecutive years.⁴² Although *rēhu* most often describes livestock and its products, in a few instances it also describes agricultural products.⁴³ The sheer numbers of *nāqidū ša rēhi*, or herdsmen associated with *rēhu* in other ways, led van Driel to make the following statement:

If the entrepreneurs [scil. the herdsmen] were protégés of the crown who had a more or less open account with the institutions, the texts about debts distort the picture. These people reneged on payment of what was due . . . It is difficult to come to grips with this problem which is central to our understanding of Neo-Babylonian entrepreneurship. The backlogs are probably more a problem of the relationship owner - ‘herdsman’ than of sheep-breeding as such.⁴⁴

There is much in this short statement that is unclear, but in general it highlights the major problem in trying to understand the external management’s relationship with the Eanna, to wit: if *rēhu* actually references an outstanding (and overdue) balance, how does one account for the many mentions of *nāqidū ša rēhi*? That there were a large number of *nāqidū ša rēhi* is evident from two texts, YOS 7 39 and 83. These texts are ledgers of the *rēhu* in sheep and goats, wool, and goat hair of the herdsmen under the herd supervisors Ibni-Ištar (YOS 7 39) and Arad-Bēl (YOS 7 83). YOS 7 39 and 83 list the total *rēhu* in sheep and goats, wool and goat hair for two particular years. YOS 7 39 lists the *rēhu* of 66 herdsmen, totaling 11,312 sheep and goats, 286 talents 8 5/6 mina of wool and 25 talents 53 1/3 mina of goat hair.⁴⁵ YOS 7 83 lists the *rēhu* of 40 herdsmen, totaling well over 10,000 sheep and goats. In YOS 7 39, two of the 66 herdsmen have no *rēhu* in

⁴¹ E.g., TCL 13 164:6ff. and YOS 7 46:1ff.

⁴² E.g., YOS 7 164:9.

⁴³ E.g., UCP 8 99 no. 36:2.

⁴⁴ Van Driel, “Sheep and Goats,” 223f.

⁴⁵ San Nicolò, “Viehwirtschaft IV,” 363.

sheep and goats (lines 25 and 59). In YOS 7 83 one (line 36, and perhaps two others in broken contexts, lines 25 and 34) out of 40 is without *rēhu* in animals. These texts list the total *rēhu* of one herd supervisor each at a time when at least three, and at times four, were functioning. The number of *nāqidū ša rēhi* was huge, and the amount of animals and fiber considered *rēhu* was astronomical.

One might argue that the *nāqidū ša rēhi* constitute a small part of the total number of herdsmen. That is, it is possible that the herdsmen appear in frequent association with *rēhu* because the collection of outstanding debts generates texts, whereas balanced accounts require no further action. This is unlikely. If there were a significant number of herdsmen “in the black” it is surprising that they do not occur anywhere in the known textual record.⁴⁶ As a matter of fact, one finds herdsmen in texts associated with the “bow obligation,” which has nothing to do with *rēhu*. One of these texts, YOS 7 65,⁴⁷ lists the names of 39 herdsmen, of whom 21 are identifiable (the rest of the names are broken or without patronym). Of these, one finds the vast majority in other texts identified as *nāqidū ša rēhi*.⁴⁸ Yet generally speaking, just in terms of sheer numbers,

⁴⁶ In addition to the few entries in YOS 7 38 and 83 that mark no balances for certain herdsmen UCP 9/1, 85, undated, an unusual text resembling a livestock inventory text, mentions PAP-ma 1040 *sēni* (U_g.UDU.HI.A) *ina qāt Dannu ina pan Bēl-ēpuš apil Bēl-uballit ša la rēhi mahir*, “a grand total of 1040 sheep and goats received from Dannu and (placed) under the responsibility of Bēl-ēpuš/Bēl-uballit, without a balance.” This may simply mean that the herd was transferred from one person to another without prior obligations.

⁴⁷ See here, Chapter Five, pp. 215ff.

⁴⁸ The following herdsmen appear in YOS 7 65. Each name here is followed by a reference to another text in which he appears as a herdsman *ša rēhi*: line 1 Innin-šuma-iškun, YOS 7 87:8; line 2 Nabû-rē'ûšunu, no other occurrence, here called a Širku *ša ina kadāni*; line 3 Nanâ-karâbî, YOS 7 83:10; line 4, Nabû-ahhê-šullim, YOS 7 83:88; line 5 Ištar-ālik-pâni, no other occurrence; line 6 Ištar-šuma-ēreš, YOS 7 83:26; line 6 Kâşiru, YOS 7 83:34; line 9 Șillâ, YOS 7 39:52; line 10 Anu-aha-iddin, TCL 13 137:1f., an order to come to rectify accounts; line 11 Ištar-tarîbi, no other occurrence; line 12 Šuma-ukîn, YOS 7 87:10; lines 13-18, names broken; line 19 Nabû-šuma-iddin, YOS 7 39:24; line 20 Nabû-dûr-pânija, YOS 7 83:17; line 21 Bēl-ēreš, YOS 7 83:42; line 22 Nabû-mušetiq-uddê, no occurrence *ša rēhi*, but see YOS 6

YOS 7 39 and 83 give the names of over one hundred herdsmen, almost all of them *ša rēhi*. It is inconceivable that they are a small proportion of the total number of herdsmen, as one would be hard pressed to identify another segment of the Eanna's personnel of similar size. Certainly, then, the vast majority of herdsmen at the Eanna of Uruk were considered *ša rēhi* in at least the late Neo-Babylonian/early Achaemenid period.

The verb *rāhu* and its derivative *rēhu* both occur in YOS 7 8, the audit of the offering shepherd (see here, Chapter Four, pp. 137ff.). There the terms refer to animals that the offering shepherd had under his control (*ina panišu*), but that had not been put to their specified use—a balance in live animals carried over from one audit to the next. In NBC 4897 *rēhu* refers to the difference between the projected and actual numbers of animals in a herd, but it is evident that this general meaning of *rēhu* cannot apply to a *nāqidu ša rēhi*, as this would make little sense. In fact, two texts show unequivocally that the Eanna understood *rēhu* in terms of real assets (as compared to intangible numbers). The first, YOS 6 155, the lease of temple livestock discussed above (here, pp. 40f.), gives perhaps the clearest example of this. This difficult section (lines 20ff.) of the text reads:

*elat 20 puḥālī 400 laḥrī 160 kalūmī 320 parrātī naphar 900 peṣūtū 50
enzātū 20 uriṣū 30 unīqātī naphar 100 ṣalmātū PAP-ma 1000 ḫēnu ša ina
rēhi ša muḥhišu ina Nisannu MU.13.KAM ana qabuttu ana Nabū-nāṣir apil
Lāqīpi inamdinu elat rēḥānu maḥrūtu ša ina muḥhišu*

Apart from 20 rams, 400 ewes, 160 male lambs, 320 female lambs, a total of 900 “whites” (and) 50 she-goats, 20 he-goats, and 30 young she-goats,

77:30 and YOS 7 7:78, 80, 96; line 23 Dādiya, YOS 7 83:33; line 24 Nabū-aha-iddin, YOS 7 83:23; line 25 Zērija, YOS 7 87:12; line 26 Ardija, YOS 7 184:5ff.; line 27 Kinā, YOS 7 39:8; The end of the text (lines 28-32) lists nine herdsmen without patronyms.

a total of 100 “blacks”—a grand total of 1000 sheep and goats, which in month I (Nisannu) of year 13 (of Nabonidus) he [scil. the herdsman Nanā-aha-iddin] will give to the fold to Nabû-nāṣir/Lāqīpu from the *rēhu* which is debited against him (i.e., Nanā-aha-iddin). (This is all) apart from earlier *rēhus* debited against him.

My understanding of this section, which differs from van Driel’s and von Bolla’s, is that the Eanna is taking animals against the balance of one herdsman, and giving them to the fold of another.⁴⁹ Nanā-aha-iddin/Lāqīpu and Nabû-nāṣir/Lāqīpu are, evidently, brothers.⁵⁰ That the sheep to be transferred are mostly females confirms that they are being moved in order to start a new herd (or perhaps to augment an existing herd), not that they will be slaughtered. In effect, as we shall see, one expects a balance due to consist mostly of male animals, and a balance granted, transferred, or carried forward to consist mostly of female animals. Of importance here, though, is the fact that the animals are being taken *ina rēhi ša ina muḥlišu*, “from the balance which is debited against him.” That is, not only does the Eanna consider *rēhu* an asset, but here it is an asset in live animals that can be reallocated (without, incidentally, having to collect them at a central redistribution point).

⁴⁹ I do not agree with van Driel (“Sheep and Goats,” 223), who summarizes this section as “he will deliver … 1000 heads as part of a debt due since month i yr. 13,” for reasons that are obvious in my translation. Von Bolla’s translation (*Viehpacht*, 127f.) is closer to mine: “… alles zusammen 1000 (Stück) Kleinvieh, welche von dem Rest zu seinen Lasten (sind). Im Monate Nisan des 13. Jahres wird man (es) in die Hürde dem Nabû-nāṣir, dem Nachkommen des Lāqīpu, geben.”

⁵⁰ On Nabû-nāṣir/Lāqīpu see here, Chapter Six, pp. 241ff.

The second text that demonstrates the sense of *rēhu* as asset is YOS 7 43.⁵¹ In this text Bēl-ibni/Kabtija guarantees that by the fifteenth of month II (Ajaru) (lines 6ff.), PN₁ PN₂ u PN₃ *rēhi ša lāti* (ÁB.GU₄.HI.A) u *šēni makkūr Bēlti ša Uruk ša muhhišunu ibbakunimma ina Eanna išemmitu*, “(the herdsmen) PN₁, PN₂, and PN₃ will bring forth the *rēhu* of cattle and sheep and goats, the property of the Lady of Uruk which is debited against them, and brand (them) in the Eanna.” This is referred to later in the text (lines 8ff.) as “they will give (the *rēhu* animals) to the property of the Eanna” (*rēhi . . . ana makkūr Eanna nadānu*).⁵² If they fail to do this, the text continues (lines 11ff.), *Bēl-ibni apilšu ša Kabtija rēhi ā ša lāti* (ÁB.GU₄.HI.A) u *šēni ša MU.6.KAM ša muhhi PN₁ PN₂ u PN₃ ana makkūr Eanna iṭṭir*, “Bēl-ibni/Kabtija will pay the treasury of the Eanna the aforesaid *rēhu* of cattle and sheep and goats of the sixth year which is debited against (the herdsmen) PN₁, PN₂, and PN₃.” The word *rēhu* here refers to live animals that are considered the property of the Eanna (as the *rēhu* animals are branded such), but that remain on the hoof with the herdsmen as a liability (*ša muhhi*). San Nicolò is certainly correct that *rēhu* here refers to newborn animals.⁵³ The text dates to month XII (February/March), and has a due date in month II (April/May), which accords with a winter lambing/calving to be accounted for at the spring shearing. My understanding is that the animals remain with the three herdsmen and that *rēhu* becomes outstanding (and

⁵¹ Edited by San Nicolò, “Viehwirtschaft V,” 26ff. See also the use of *rēhu* in TCL 13 162 (see here, pp. 97f.) and YOS 7 198 (see here, pp. 114f.).

⁵² Actually expressed negatively, *kī . . . rēhu . . . ana makkūr Eanna la ittannū*, “if they do not give the *rēhu*- (animals) to the property of the Eanna.” See here, p. 60 note 54 as well.

⁵³ “Viehwirtschaft V,” 29 (note to line 8).

thus must be paid in full), and the herdsmen delinquent, if the marking is not made.⁵⁴

Failure to brand the animals was tantamount to stealing them.⁵⁵

Thus, the difference between the meaning of *rēhu* in these two texts (YOS 6 155 and YOS 7 43) and the end of NBC 4897 is evident: in the former two texts it refers to actual animals that can be reallocated and branded, and in the latter text it is used as an administrative term to refer to the difference between the projected and actual size of a herd. These are not necessarily at odds. The nature of contract breeding is such that the growth of each herd was reckoned under two different systems: under one, the Eanna used a standard accounting measure to project herd size (see NBC 4897)—i.e., that every 100 ewes will yield the Eanna 66 2/3 offspring (which it will then divide up into two-thirds female, one third male) and that ten percent of the herd dies every year; under the

⁵⁴ San Nicolò argues (*ibid.*) that the payment guarantee at the end of the text implies that these animals will remain at the temple after the branding for the repayment of a remainder-debt (*Restschuld*). I am, however, unable to find other examples where members of the external management give (*nadānu*) animals as *rēhu* to the *makkūr Eanna* (“assets of the Eanna”). In point of fact, the animals under the control of the herdsmen were the *makkūr Eanna*. Animals taken in from the external management are put to particular uses, and texts either name the location or person to whom they are to be delivered (although this can be expressed ambiguously as “he will give to the Lady of Uruk/Eanna,” see here, pp. 52f.). In fact, the only uses of animals in the phrase *ana makkūr Eanna nadānu* that I am able to find are as penalties for temple outsiders. For example, YOS 6 169:16f.: 1 *adi* 30 *eli* PN *ana nadānu ana makkūr Eanna iprusu*, “they imposed upon PN a thirtyfold penalty to be paid to the *makkūr Eanna*,” and YOS 7 161:12ff.: UD.25.KAM ša Addari MU.3.KAM *sēni ā* 155 PN *ibbakamma ina Eanna išemmitma ana makkūr Eanna inamdin*, “by the twenty-fifth of month XII (Addaru), year three, PN will bring the said 155 sheep and goats (as a penalty, lines 9ff.), brand (them) at the Eanna, and give them to the *makkūr Eanna*.” In other words, these texts refer to the bringing of outside animals into the Eanna. The phrase PN₁ *rēhu . . . ša muhhi* PN₂ . . . *ana makkūr Eanna ittir*, “PN₁ will pay the *rēhu* . . . which is debited against PN₂ . . . to the treasury of the Eanna,” which is the payment guarantee of YOS 7 43, may imply that the *rēhu* is to be paid off with other property or cash (see Chapter Three, Section III.D.1). If the purpose of YOS 7 43 was only to obligate the herdsmen to deliver animals to pay off a debt, then the branding is superfluous to that action (and the text is written like no other such obligation). However, as I see it, the phrase *rēhi . . . ibbakunimma ina Eanna išemmitu* is expressed in the negative by the following (*kī*) . . . *rēhi . . . ana makkūr Eanna la ittannū*, in that the branding of the animals renders them the property of the Lady of Uruk (see as well YOS 6 233 [see here, Chapter Six, pp. 246f.], YOS 7 85). The text does not mark an obligation to deliver animals, but instead marks the obligation for the herdsmen to brand those animals that belong to the Eanna but that will remain with the herdsmen.

⁵⁵ On branding and its legal ramifications see San Nicolò, “Viehwirtschaft I,” 288ff, and here, Chapter Six, pp. 247f.

other, the herdsman dealt with the actual reproductive realities on the ground, and the number of lambs born in any year depended upon an assortment of factors (see here, pp. 68f.). Given an amenable herdsman (here, pp. 92ff.), there was little reason to evaluate one accounting system in terms of another.⁵⁶ That is, seeing that the herdsmen were under contract to produce a calculable number of animals per year, it was contrary to purpose for the Eanna to catalog the actual year-to-year fluctuations of its herds under its multitude of herdsmen. Moreover, the gauge of herd size—ewes—remained with the herdsman as productive capital, whereas the actual relationship between the herdsman and the Eanna was in the apportioning of the herd’s consumables (male lambs, wool, and perhaps dairy). I expand upon these observations in the following pages.

In point of fact, the Eanna booked its projections, and *not* the actual number of animals, as assets, even though some, if not most, herds would regularly fail to satisfy the terms of the contract.⁵⁷ Thus, *rēhu* in association with the external management should refer to a projected number of animals that belong to the temple (pursuant to the terms of contracts like YOS 6 155) but that remain under the control of a herdsman. Yet the etymology of *rēhu*—“to remain, be left over”—forces us to assume that it refers to the projected assets of the Eanna less something else. Without any herd audits apart from

⁵⁶ It is not, I believe, by chance that NBC 4897 is the only complete year-to-year sheep and goat audit we have for the Neo-Babylonian Eanna, nor do I believe that it is unusual that it marks the only audit of that herd in ten years.

⁵⁷ This may indeed apply to wool as well. See Erlend Gehlken, *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv*, II: *Texte verschiedener Inhalts*, Ausgrabungen in Uruk-Warka Endberichte, Band 11 (Mainz am Rhein: von Zabern, 1996), 4 where he discusses texts that estimate wool at the contractual rate of $1\frac{1}{2}$ mina per sheep—add GCCI 1 252 (see here, Chapter Four, pp. 151f.) where a given amount of wool (in a broken context) rendered into mina equals $1\frac{1}{2}$ times the number of ewes and rams, and also YOS 17 115:1-12, where six sets of sheep (*sēnu*, but see following) are mentioned (lines 1, 3, 5, 7, 9, and 11, at which point the text continues, but the numbers are too broken to read) and each of these is followed by an amount of wool that, rendered into mina, equals $1\frac{1}{2}$ the number of sheep (lines 2, 4, 6, 8, 10, and 12).

NBC 4897 it is impossible to know for certain, yet I believe there are two possible solutions: either *rēhu* is the difference between the number of those animals that are projected to be with herdsmen and those that are extracted from the herd and either consumed or reallocated; or *rēhu* refers to the projected number of animals due from the herdsmen according to the terms of the share-breeding contract, and is thus the difference between the Eanna's share of a herd and the herdsman's. I favor the former. As we shall see, *rēhu* fluctuates, both considerably and slightly, and was commutable. Therefore, it should be something that one can add to and subtract from, not something that only grows with time. It is possible that the meaning of *rēhu* changed over time from the difference between projected and "inspected" (as in NBC 4897) to the difference between projected and harvested or reallocated, as each reflects the difference between projected and actual animal assets. This change in meaning may even reflect the difference between direct and contractual livestock management, or the change in livestock management during the reign of Nabonidus (see, for example, here, pp. 125f.). I will translate *rēhu* as "balance," but note that this translation is based on usage, not etymology.

This interpretation of *rēhu* differs considerably from that of "arrears" or "backlogs." Arrearage suggests an overdue and unpaid amount, positing that the herdsmen were negligent in payment and were holding animals back. My understanding of *rēhu* entails that the Eanna stored animal capital "on the hoof" with the herdsmen, anticipating a discrepancy between the ledger and actual number of animals. Translating *nāqidu ša rēhi* as "a herdsman in arrears," or understanding *rēhu* in terms of "reneging," "backlogs," and "debts" I believe misconstrues the relationship between the temple and its herdsmen. It

assumes that the herdsmen were independent from the Eanna, or that they paid animals to the temple as sort of tax or rent from their own private herds. This is decidedly not the case. At any given time, the vast majority of animals under the herdmen's control—i.e., the female animals—were considered the property of the Eanna. Although the share-breeding relationship may have granted the herdsmen some independence in the exploitation and utilization of a herd and its products, their primary responsibility remained the care and propagation of the Eanna's animals.

Given this, one cannot take the explicit terms of the share-breeding contract at face value. Any set of offspring will consist roughly of equal numbers of male and female lambs.⁵⁸ YOS 6 155 stipulates that lambs, both male and female, equal to two-thirds the number of viable ewes are to be given to the Lady of Uruk every year (lines 11ff. *ina MU.AN.NA kalūmī u parrāti . . . ana Bēlti ša Uruk inamdin*), but there is no evidence that the Eanna regularly extracted female animals from any herd, nor would this make sense. In fact, when we do find female animals in the textual record, most often the Eanna is giving them *to* the herdsman.⁵⁹ If indeed the Eanna extracted its share of the increase every year (with the rest left to the herdsman), then that herd's usefulness for the Eanna would last only as long as the original ewes continue to breed. Say, for example, the temple granted a herd of sheep with 100 ewes to a herdsman, and one year later those ewes produced 80 lambs. If the temple extracted 66 of those lambs from the herd as its share (two-thirds of 100 ewes), the herdsman would be entitled to the remaining 14, *and these would be his personal take and therefore of no future use to the temple*. The

⁵⁸ See Dahl and Hjort, *Having Herds*, section 4.1.1

⁵⁹ See, for example, here, Chapter Four, pp. 202f.

temple's share after the next lambing would come from the original 100 ewes (which would now be 90 with the ten percent death allowance). This is both uneconomical and impractical. It was not as though "outside" herdsmen held one set of animals on contract and the offspring from those animals were transferred to a set of home herds controlled by temple employees.

As shown by NBC 4897, the Eanna made its projections of herd size as though its complete share of the increase remained in the herd every year; extractions from the herd were counted separately. Moreover, the Eanna's projected share of the yearly increase did not consist of equal numbers of male and female lambs, but instead followed the formula two-thirds female, one-third male (see here, pp. 46ff.). This formula derives from the idea that all the female offspring are kept in the herd, which in turn reflects basic animal husbandry.

Conversely, the temple did extract male lambs from its herds for sacrifice. In one sense, the very purpose of the external management was to supply the temple with male lambs for offerings, in much the same way that any household used its male lambs for meat. I am not aware of evidence that the Eanna sold large numbers of live male animals, nor do I know of any evidence that males were slaughtered for any type of secular consumption.⁶⁰ According to YOS 7 8, three-fourths of the lambs used for sacrifices originated with members of the external management. Sacrificial prerequisites

⁶⁰ On the sale of the Eanna's animals see here, Chapter Two, p. 17f. note 12.

called for a minimum of 270 male sheep per month, but months with significant festival days may have seen the slaughter of well over that number.⁶¹

In herds of sheep that are used for the production of meat, as compared to being used primarily for fiber production or as security against famine, males are kept to the minimum necessary to impregnate the ewes, and the rest are harvested.⁶² Harvesting the male lambs decreases the competition among the animals for good pasture (the importance of which should not be underestimated for lean years), provides the herdsman with a yearly cash crop, and makes the herd easier to control.

In YOS 6 155 the initial herd consisted of 1655 female and 187 male sheep—males made up just over ten percent of the herd at inception. In the later section of that text, the transferred herd consists of around twenty-five percent males.⁶³ Livestock inventory texts record herds having on average twelve percent males (recorded rams and male lambs to ewes and female lambs). Some, however, record a male population as low as four percent (e.g., YOS 7 193, GCCI 2 265) and others as high as 20-25% (e.g., GCCI 1 252, YOS 7 48), but these numbers are unreliable for determining practicable sex ratios as livestock inventory texts almost certainly show the herd in an artificial state.⁶⁴ The few instances where I believe a text documents the make-up of an actual herd show a much wider difference between males and females than that reported in livestock

⁶¹ See here, Chapter Four, pp. 195f.

⁶² See Redding, *Decision Making*, 30ff.

⁶³ 180 rams and male lambs to 720 ewes and female lambs, see here, pp. 57f.

⁶⁴ See here, Chapter Two, pp. 23ff.

inventory texts. NBC 4897 (see here, pp. 44ff) reports *actual* herd ratios of 1:28 in line 35 and 1:13 in the original set of animals (line 2). BIN 1 176 gives ratios of 1:36 and 1:15 (see here, pp. 71f.). Studies show that sex ratios in herds of Middle Eastern and African sheep vary widely and were certainly not static over time (as weather patterns changed, etc.). Gudrun Dahl and Anders Hjort report ratios between 1:5 and 1:60, with rates of 1:20 in Arabia and 1:5 in southern Iran.⁶⁵

Although it is not possible to propose even a rough sex ratio for the Eanna herds, if nothing else all of the available evidence indicates that the herdsmen strove to minimize the number of males. The problem with simply assuming that the herdsmen kept males to the absolute minimum is that we know nothing about the relationship between the temple and the herdsmen in terms of wool production. Although livestock contracts stipulate that 1 1/2 mina of wool are due yearly from every ram and ewe, the number of rams left in the herd was, one assumes, left open to negotiation. It is possible that the temple expected the herdsmen to keep as many males as possible in the herd in order to maximize wool production, and that the herdsmen strove (or were in effect forced) to limit the number of males in order to obtain the most efficient use of pasturage.

Thus we can posit at least three conditions that factor into the utilization of the male lambs from the temple's point of view: first, how many males were needed to remain in the herd to impregnate the ewes; second, how many males the Eanna wanted to keep in the herd for wool production against how many the herdsman was able to control and care for (which overlapped the first); and, finally, how many male lambs were extracted

⁶⁵ *Having Herds*, section 4.1.

for sacrifices. The temple had no ritual use for older male sheep, as most texts, when they are specific, call for the collection of *kalūmu* or *parru* male lambs for sacrificial purposes.⁶⁶ Herd projections filled out the terms of a share-breeding contract with male lambs (see here, pp. 46ff.), but this had no practical application in the actual management of the herd. In point of fact, the allocation of male lambs should have been the most negotiable part of the contract between the Eanna and its herdsmen.

Male lambs that the temple did not physically claim remained under the control of the herdsmen, and they in turn needed only a small number of males for the further growth of the herds. However many extra males were negotiated to remain in the herd for wool production, if any, remains unknown, although it is most likely that the herdsmen reduced the males to the absolute minimum. Males served no function, either inside the herd or, after a short time, in temple sacrifices. The herdsman's primary personal livelihood, then, was in the trade and sale of the surplus male lambs (as is true for all livestock owners), inasmuch as those male lambs that the Eanna did not take became male lambs available to him for exchange or sale. Apart from the fact that a herdsman at times received orders from his superiors to supply an unusually large number of male lambs at one particular time,⁶⁷ I know of no evidence that the running of a balance from year to year had a negative effect on the management of the herd.

⁶⁶ I am not aware of any explicit evidence that dictates at what age a sheep or goat is appropriate for sacrifice. Because the animals were used for their meat, they were certainly slaughtered before their second year (see Dahl and Hjort, *Having Herds*, section 4.0 where they use 18 months as the optimal age of slaughter), and the evidence is unequivocal that the temple only extracted male lambs from the external management. What differentiates a *parru* male lamb from a *kalūmu* has yet to be resolved with certainty (I discuss the terminology in detail here, Chapter Two, pp. 35ff.), see van Driel, "Sheep and Goats," 231.

⁶⁷ See here, pp. 82ff.

In summary, in animal husbandry for the production of meat one must differentiate between productive capital (females) and consumables (male animals, fiber, dairy products). Females remained in the herd until they were no longer productive, and most males were harvested before their second year. Generally speaking, in a herd that is managed directly—for example, it is the property of a single family, nomadic tribe, small temple, or village—the yearly crop of male lambs, wool, and dairy products are consumed and/or used as cash crops for the owner(s). In a herd that is managed indirectly or contractually, the relationship between the owner and manager of a herd must account both for an apportioning of the cash crops between them and for the fact that the owner's females remain under the control of the manager. In other words, the manager must control the productive capital in order to produce the consumables, yet he "owes" (at least a percentage of) both of them to the owner.

Accounting for this contractual relationship is complicated by the fact that sheep and goat management may be wildly erratic from year to year. Catastrophes such as disease or famine obviously decreased the size of a herd, but basic long-term herd management also calls for routine speculation on locations of good pasture, favorable weather, the ability to thwart rustlers and disease, the trustworthiness of one's subordinate shepherds, and so on. The results from these speculations in terms of the maintenance and increase of a herd fluctuated from year to year.⁶⁸ In contrast it is also possible that accurate long-term speculation led some ewes to lamb three times every two years, giving the herdsman an extra, supra-contractual crop of animals. Moreover, all this assumes the owner was

⁶⁸ As ewe fertility is linked to nutrition (see Redding, *Decision Making*, 52-57), finding good pasture is of paramount importance.

able to monitor and inspect the herd at any given time, whereas the competition for local pasturage may have been such that certain herdsmen took their herds to distant pasturage to develop, and thus were not seen for years at a time.⁶⁹

These conditions necessitate the creation of a standard by which the Eanna could book current and future assets for an attached industry that was inherently unpredictable and itinerant in practice, gauged in one way (ewes) yet negotiated in another (male lambs), and farmed out to hundreds of different people. This was, I believe, the actual purpose of the share-breeding contract. Its stipulations were not binding in the sense that they needed to be satisfied every year—as I have shown this is incompatible with basic animal husbandry—instead the contract served to sanction the method by which the temple calculated future assets from a herd. That is, the Eanna would have been able to calculate its share of a herd at any time based upon the number of ewes at the herd's inception. So, for example, the temple knew the projected number of animals due from a herdsman who had gone missing, or whose herd was allowed to propagate unchecked, for any number of years. Yet at the same time this standard was functionally arbitrary in the sense that it bore no real relationship to the numbers and utilization of actually existing animals. It was based upon the number of ewes, but the real business of the herdsmen, and their relationship with the Eanna, was in the division and utilization of the herd's consumables from one year to the next.

⁶⁹ See Francis Joannès, *Textes économiques de la Babylonie récente*, Études Assyriologiques, 5 (Paris: Éditions Recherche sur les Civilisations, 1982), 179-183.

Thus, the Eanna used *rēhu* as an administrative umbrella term under which the herdsmen conducted business. It referred generally to animals owed to the Eanna under the control of the herdsmen, and thus payments were made *ina rēhi*, “against (lit. from) the balance.” In one sense *rēhu* is similar to a mortgage or a long-term loan in that there is a reasonable expectation that a creditor will not demand full repayment as long as the borrower satisfies negotiated installment payments. Whereas modern-day mortgages are paid down in set monthly installments, I believe that the Eanna’s herdsmen negotiated their installments with the temple from year to year, depending upon the state of the herd and the results of that year’s breeding season.⁷⁰ The full debt—i.e., the herd at the legal inception and projected increases—became due when installments were missed or deficient, negotiations were done in bad faith, herdsmen disappeared from the area or absconded with the animals, and so on. This notwithstanding, the analogy between *rēhu* and mortgages must not be taken too far, as there was no incentive to pay down a *rēhu*. In fact, given that *rēhu* primarily referred to projected female animals, it is likely that a herdsman in good standing had a *rēhu* that only grew over a period of years.

We must explore this issue further. I first discuss the evidence for the fluctuation of balances (II.B), then that for increasing balances (II.C), and finally that for decreasing balances (II.D., with a subsection on the commutation of balances, II.E).

⁷⁰ See Govert van Driel, *Elusive Silver*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 95 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 2002), 169 on the practical application of the “Edict of Belshazzar” to actual agricultural practice: “Not unlike other rent farm documents the [Edict] imposes a fixed rent, while known practical arrangements always suggest that the specific amount to be delivered was to be estimated and established through an *imittu* [estimation] procedure just before the harvest, dependent as it was on the size of the year’s harvest.”

II.B. Fluctuating Balances

Although I do not deal with the production of fiber in this dissertation, there is BM 176, which contemplates a *rēhu* in wool in terms of an estimated balance due less payments. This short text lists two herds under two different managers. The obverse reads:

1. [x x x x d]na-na-a šá ina É.AN.NA x x ITI.NE UD.21.KAM MU.31.KAM dAG-NÍG.DU-
Š[EŠ]
2. LUGAL.TIN.TIR.KI

<i>pu!</i> - <i>hal!</i>	<i>U</i> ₈	<i>ka-lum</i>	<i>par</i> - <i>rat</i>	PAP BABBAR- <i>ti</i>	MÁŠ. GAL	ÜZ	MÁŠ. TUR	MUNUS. ÁŠ.GÄR	PAP GE ₆ - <i>tum</i>	PAP- <i>ma</i> <i>še-e-nu</i> NÍG.GA BAR.GAL <i>ka-lum</i>
6	215	1	10	232		3		PAP 3!	[PAP].MA 235! ^m lu-li- ia A ^m su-ú-[x]	
8	117	5	14	144!		1		PAP 1	PAP- <i>ma</i> 145 ^m il-ta-su- [di-i-ni]	

The reverse is a ruled ledger concerned with wool collection. It reads:

SÍK.HI.A SAG.DU	SÍK.HI.A <i>ha-a-tu</i>	SÍK.HI.A <i>re-e-hi</i>	
5 (GU.UN) 34½ MA.NA	3 (GU.UN)	2 (GU.UN) 34½ MA.(NA)	^m lu-li-ia
3 (GU.UN) 31½ MA.NA	2 (GU.UN) 20 MA.NA	1 (GU.UN) 11½ MA.(NA)	^m il-ta-[su]-di-i-ni

The reverse of this text lists wool in terms of the principal (i.e., estimated) amount (*qaqqadu*), the amount paid (*hātu*), and thus the remainder (*rēhu*), the difference between the first two.⁷¹ Thus, this text makes it unequivocally clear that wool dues for this particular year were not paid in full at this particular time, and that the difference between what was paid and what was due was classified as *rēhu*.

It is interesting to note that the principal amount of wool due from each person envisions a herd size that is very close to the size of that listed on the obverse. For example, using the standard contractual terms, 5 talents 34½ mina of wool contemplates a

⁷¹ See also Gehlken, *Uruk* I no. 39 which lists a sum of wool *ana hāti* and then the remainder.

herd size of 223 sheep. The number of animals listed for Lulija on the obverse is 232, but if we subtract the young animals (*kalūmu* and *parratu*, some of which were probably too young to shear) the number is 221. For the other herd manager, 3 talents $3\frac{1}{2}$ mina of wool contemplates a herd size of 141 sheep, and the obverse gives the number as 144 (it is 129 if the young are subtracted). If *kalūmu* and *parratu* include both newborn lambs and yearlings, it is possible that some of them were shearable, which would then account for the slight differences between herd size and wool amounts. Note as well that the ratio of male to female animals is larger than in most livestock inventory texts.⁷²

To the best of my knowledge, no other text records the principal amount of fiber or livestock due against the amount actually received. BIN 1 177, another ledger of [sheep], lambs, goats, wool, and an uncertain UDU UŠ ME,⁷³ has a column for “shortage, deficit” (*miṭītu*, the fourth column from the right), which may parallel *rēhu* in function, but the entries are blank. Also, Dillard NB Lewis Coll.: FLP 1528: 3 mentions the *naphar* 30 *immerū* (U₈.UDU.HI.A) *miṭīti ša* MU.13.KAM, “the total of 30 sheep, the shortage of the thirteenth year.”⁷⁴

Of the more than one hundred herdsmen who appear in both YOS 7 39 and 83 (see here, pp. 55f.), seventeen appear in both texts. I have listed them in Table 3.2. YOS 7 39 dates to Cyrus 18-V-04. YOS 7 83 dates either to late in the reign of Cyrus or to the

⁷² See here, Chapter Three, pp. 65f.

⁷³ Perhaps to be read KUŠ!.<UŠ>.ME, “hides.”

⁷⁴ *miṭītu* is also mentioned in a few other texts from the Neo-Babylonian/early Achaemenid period (e.g., YOS 7 189:15) with the meaning, it seems, of an actual shortage in delivery. In TCL 12 18:5 the Eanna claims part of the upcoming harvest of a man in lieu of a *miṭītu ša šēni*.

reign of Cambyses.⁷⁵ Hence, YOS 7 83 reports on balances at least four years later than YOS 7 39.

⁷⁵ One finds the first appearance of Arad-Bēl, the herd supervisor in YOS 7 83, as a herd supervisor in YOS 7 65:8 and 27 (although he is actually not labeled a herd supervisor, his function in this text parallels those who are), which dates to Cyrus 06-IV-08. Other occurrences of Arad-Bēl as a herd supervisor date only to the reign of Cambyses (see Hans Kümmel, *Familie, Beruf und Amt im spätbabylonischen Uruk*, Abhandlungen der Deutschen Orient-Gesellschaft, 20 [Berlin: Mann, 1979], 56), so by that reasoning YOS 7 83 must date to at least the end of Cyrus' reign. See also here, Chapter Six, pp. 253ff.

Table 3.2 : The given balances (*rēbus*) in sheep and goats, wool, and goat hair for herdsmen who appear in both YOS 7 39 and YOS 7 83

PN	sheep and goats	sheep and goats	wool in mina	wool in mina	goat hair in mina	goat hair in mina
	YOS 7 39	YOS 7 83	YOS 7 39	YOS 7 83	YOS 7 39	YOS 7 83
1. Nabû-dûr-panija/ Šuma-ukîn (4 ^a , 17)	127	237	315	173	0	37 $\frac{1}{3}$
2. Ištar-šuma-ēreš/ Nabû-ēpuš (5, 26)	983	684	1998	1034	0	18
3. Kinâ/ Dannu-Nergal (8, 15)	79	110	306 $\frac{1}{2}$	391 $\frac{1}{2}$	0	5 $\frac{1}{3}$
4. Ištar-aha-iddin/ Nabû-ahhê-šullim (9 ^b , 11)	55	17	83 $\frac{1}{2}$	85	11 $\frac{1}{3}$	0
5. Bêl-ēreš/ Nâdinu (10, 42)	284	142	387 $\frac{1}{2}$	357 $\frac{1}{2}$	0	12 2/3
6. Arad-Bêl/ Šarru-kin ^c (14, 35)	108	156	186 $\frac{1}{2}$	394 $\frac{1}{2}$	26	2
7. Bânija/ Nabû-ušezib (16, 21)	119	69	166	143	0	2 2/3
8. Hašdija/ Nabû-mušetiq-uddê (18, 6)	39	71	216 $\frac{1}{2}$	153	0	1 $\frac{1}{3}$
9. Sîn-ibni/ Nanâ-ēreš (19, 14)	73	136	242	366 $\frac{1}{2}$	0	10
10. Zumbu/ Nanâ-ēreš (20, 40)	179	129	189 $\frac{1}{2}$	160 $\frac{1}{3}$	34 $\frac{1}{3}$	29 $\frac{1}{3}$
11. Bâssija/ Uzubat?-ilu ^d (21, 8)	6	287	274 $\frac{1}{2}$	508	0	10
12. Zêrija/ Bêl-ēreš (23, 29) ^e	117	120	34	110	60	11 $\frac{1}{3}$
13. Nabû-šuma-iddin /Nanâ-ēreš (24, 41)	120	124	256	359 $\frac{1}{2}$	20	6
14. Nabû-mušetiq- uddê/Nanâ-iddin (28, 16) ^f	219	245	428	382	52	46 2/3
15. Mušezib-Bêl/ Mušallim-Marduk (29,23)	291	160	566 $\frac{1}{2}$	254 $\frac{1}{2}$	0	21 $\frac{1}{3}$
16. Nanâ-iddin/ Arad-iddin (33, 36)	533	0	144	90 $\frac{1}{2}$	368	0
17. Nabû-mukîn-apli /Ahî-jâlidu (63, 20)	180	144	370	145	0	26 2/3

Notes to table 3.2: Names are followed by the line in which the herdsman appears in YOS 7 39 and YOS 7 83, respectively.

^a In YOS 7 39 he appears without patronym.

^b In YOS 7 39 he appears without patronym.

^c Arad-Bēl later became a herd supervisor.

^d The patronym is written *ú-zu-bat-DINGIR* in the former and *ú-zu-úb-ba(!)-tú-DINGIR* in the latter.

Tremayne, in the index to YOS 7, reads: *u-zu-nu-DINGIR* and *u-zu-ub-áš-tú-DINGIR*.

^e Without patronym in both texts, but with brother Nabû-ahhē-iddin.

^f Without patronym in both texts, but with brother Ištar-ahhē-eriba.

Putting aside the negligible numbers for goat hair, entries 3, 6, 9, and 11-13 show an increase in both sheep and goats and wool, whereas entries 2, 5, 7, 10, 15-17 show decreases. Entries 1, 4, 8, and 14 show an increase in one category and a decrease in the other. Table 3.3 gives the percentage of increase or decrease of sheep and goats and wool from YOS 7 39 to YOS 7 83, using the numbers from Table 3.2.

Table 3.3: Percentage of increase/decrease of the balance of sheep and goats and wool of the herdsmen who appear in Table 3.2.

Entry	Increase/Decrease in Sheep and Goats	Increase/Decrease in Wool
1.	87%	- 45%
2.	- 30%	- 48%
3.	39%	28%
4.	-69%	2%
5.	-50%	- 8%
6.	44%	112%
7.	-42%	-14%
8.	82%	- 29%
9.	86%	51%
10.	-28%	- 15%
11.	4683%	85%
12.	3%	224%
13.	3%	40%
14.	12%	- 11%
15.	- 45%	- 55%
16.	- 100%	- 37%
17.	-20%	- 61%

What is perhaps most striking about these numbers is their apparent haphazardness. In the time between these two texts, *rēhu* both increases and decreases, both slightly and considerably, and there is no evident relationship between *rēhu* in animals and in wool. One expects reasonable increases in balances from the projected growth of the herds; decreases and aberrant increases in balances require other explanations. As I discuss below, aberrant increases occurred when the Eanna augmented the herds with additional animals. Famine, disease, or some other devastation decreased the *size* of a herdsman's herd, but these things would not necessarily decrease the *balance*. Assume, for example, a herdsman carries a balance of 100 animals, and an epidemic wipes out half of his actual herd; there is nothing to suggest that his balance would not have remained 100 animals. We do not know whether the herdsmen assumed such catastrophic risks, or whether the Eanna had provisions for dealing with major losses. I assume, however, that the Eanna contracted out its herds (as compared to direct management) to let others take on those risks.⁷⁶ Whatever the case may be, as I discuss below, decreases in balances can be explained with the available documentation.

II.C. Increasing Balances

Some of the increases listed in Table 3.3 are modest, and apparently the result of the natural progression of the relationship between the herdsmen and the temple. Yet it is

⁷⁶ I am not aware of any texts that deal with epidemics among sheep and goats. YOS 7 96 mentions an epidemic (*šibtu*) among cattle, and the Eanna's desire to have its herdsman account for it. I hesitate to import conclusions from this text into the current study, as cattle were considerably more valuable than sheep and goats, and were certainly subject to a different regime of care and maintenance. A decrease in pasturage may induce a herdsman to reduce his herd size, but this hardly accounts for the decreases in Tables 3.2 and 3.3 above.

impossible to analyze these numbers further, as we know neither the original size of the herds, nor the exact amount of time between the drawing up of the two texts. Even without that framework, and in view of the other entries, it is unlikely that the balance of Bāssija/Uzubat-ilu (no. 11) increased from 6 to 287 solely by means of an at least four-year projected growth of the herd. Another interesting example of aberrant increase or decrease is a Nabû-šuma-iškun/Gimillu who is mentioned in YOS 7 39 with a total balance of 39 sheep and goats, but is also found in YOS 7 87, a short text listing the balances of ten herdsmen, as having a balance of 1146 sheep and goats. YOS 7 87 dates to the reign of Cyrus; the year is broken, but it must date to a time within four years of YOS 7 39.

I attribute aberrant increases in the balance of a herd to the fact that the temple periodically augmented the herds with outside animals. Animals that the temple collected from outside as *irbu* are the best-documented type of animal augmentation. As I discuss in Chapter Four, *irbu*—which literally means “income”—designates a certain type of intake by the temple, not only in animals, but also, *inter alia*, in barley and silver.⁷⁷ The origin and nature of this type of intake remain unclear. Nevertheless, female animals constituted the majority of animals collected as *irbu*, and there is ample evidence that the temple distributed those animals to the external management. In NBC 4879 the Eanna accounted for a real increase of 104 *irbu* animals to the herd (of which 88 were females) in the accession year of Amēl-Marduk, raising the number of projected

⁷⁷ See here, Chapter Four, pp. 164ff.

animals from 544 to 645 (after subtractions in wages and hides).⁷⁸ In YOS 7 8, an audit of the offering shepherd, the 261 *irbu* sheep mentioned as income (line 10) certainly made up the bulk of the 274 female lambs redistributed to the external management later in the text (line 21: 274 *parrātu ina qabê nadna*). The redistribution of *irbu* animals to the external management is also mentioned in YOS 7 145 (see here, Chapter Four, pp. 166f.), and BIN 1 177.

The Eanna also augmented herds with other, non-*irbu*, animals. Michael Jursa, “Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery,” *Iraq* 59 (1997): no. 4 (p. 102) lines 9’ff. read PAP-ma 45 šēnu ša ina rēhi ša uṭṭeti ina qāt [Šumā] aplišu ša [Iqīšā] abkānu ana qabutti ina pan Zērija aplišu ša [Ilteri-gabbi], “a grand total of 45 sheep and goats which were brought in against a balance in barley by Šumā/Iqīšā, (placed) in the fold under the responsibility of Zērija/Ilteri-gabbi.” It appears that Šumā/Iqīšā paid off a balance in barley with sheep and goats, and that the temple distributed the animals to a member of the external management (evidenced by the use of the word *qabuttu*). One also finds *ina rēhi* … *ana qabutti* in Dillard NB Lewis coll.: FLP 1581, a text dealing with cattle: naphar 4 lātu ša *ina rēhi* ša šēni ina qāt nāqidī abkānu ana qabutti ina pan Nergal-nāṣir aplišu ša Nanā-ibni, “a total of 4 cows which were brought in against a balance in sheep and goats by the herdsmen, (placed) in the fold under the responsibility of Nergal-nāṣir/Nanā-ibni.” In these texts the phrase *ina rēhi* PN₁ … *ana qabutti* PN₂ means “(received) against (lit. from) the balance of PN₁ (and placed) in the fold of PN₂.” One finds a similar transfer in

⁷⁸ The animals are called the *irbi ša Addari*, “the *irbu* income of the (month of) Addaru.” This would have increased the actual number of animals as well.

YOS 6 155 (see here, pp. 57f.), in which animals are transferred from the herd of Nanā-aha-iddin to his brother Nabû-nāṣir. This transfer would increase (or begin) the balance of Nabû-nāṣir, and may have *decreased* the balance of Nanā-aha-iddin, a subject to which our attention is now turned.⁷⁹

II.D. Decreasing Balances

Increases in a herdsman's balance, due both to the projected growth of a herd and to periodic additions to it, are readily explained and documented. It is more difficult to explain decreases in a herdsman's balance from one year to another. A herdsman lowered his balance from one year to the next only if he delivered to the temple animals in excess of the number due in that particular year, which included balances carried over from previous years and was gauged primarily in female animals. Moreover, as I have argued, there was no obligation to pay down a balance.

There are two problems with trying to recognize textual evidence for decreases in a herdsman's balance: first, no text of which I am aware accounts for both a herdman's payment of animals and at the same time the balance from which they were deducted;

⁷⁹ The phrase *ina rēhi ... ana qabutti* occurs again twice in YOS 6 209, but its meaning there is unclear. The first occurrence reads (lines 3ff.) PAP-ma 60 *šēnu ša Nanā-iddin/Arad-Innin arki epēš <nikkassi> ina rēhišu ībuku ana qabutti ina panišu*, “a grand total of 60 sheep and goats that Nanā-iddin/Arad-Innin brought in against his balance after the accounting, (these were given) to the fold under his control;” lines 8ff. are similar. The phrase also occurs in an even less clear context in YOS 6 220:3ff., PAP 36 *šēni ša ina rēhi ša Šamaš-aha-iddin/Nabû-zēra-iqīša ana muḥhi qabuttišu nimmār*, “we(?) will examine the total of 36 sheep and goats that are from the balance owed by Šamaš-aha-iddin/Nabû-zēra-iqīša, at(?) his flock.” Jursa (“Accounting,” 153f.) mentions a category of texts he calls memoranda (Akkadian *tahsīstu*) which often employ the first person form of a verb. A memorandum was, he states (*ibid.*) “drafted by accountants for internal use at an intermediate stage of the accounting process: it refer[red] to action still to be taken.” YOS 6 220 may belong to this category of text.

and second, I am unable to reconstruct that missing step from the available evidence. To do so, one would need a report of a herdman's balance for two consecutive years, a contemporaneous livestock inventory text, and an order or receipt for a conveyance of animals from that herdsman.⁸⁰ Therefore, in order to recognize evidence that may account for a decrease in a herdsman's balance, the system of conveyance from the external to the internal management must be fleshed out as much as possible, and any evidence that accounts for an unusually large delivery must be highlighted and discussed.

In Chapter Four, I reconstruct the organization of animal intake of the internal management. It was a system in constant operation, in which the herdsmen delivered lambs to the internal management in small numbers throughout the year, with the internal management keeping a few months' supply of animals on hand at any given time. For

⁸⁰ See, however, here, Chapter Six, pp. 254f. A few texts may result from scribal attempts to compute balances. Gehlken, *Uruk* I nos. 13 and 14, and UCP 9/1, 40 are discussed in detail by Gehlken (*Uruk* I, 26f), and I share his concerns and queries about the texts. He correctly points out the similarities between these texts and livestock inventory texts (his "Standardurkunden"). These texts are divided into sections, and each section consists of a listing of animals in the style of livestock inventory texts (with the total likewise declared *ina pan PN*), which is usually followed by a line which reads: x UDU.NITÁ.(MEŠ) x KUŠ.MEŠ x UD.DU(?). Gehlken lists variants to this line (from unpublished texts) on p. 27. The most curious thing about these texts is that each section gives two sets of numbers for rams, and the first section of UCP 9/1, 40 gives two sets of numbers for rams, ewes, and female lambs (lines 1-3). The total number of animals per section (i.e., those declared *ina pan PN*) includes only the first set of numbers, and it is probable that the numbers in the second set are referenced again in the final line of the section (i.e., as UDU.NITÁ.(MEŠ) x KUŠ.MEŠ x UD DU), but the texts are broken in such a way that this is not certain. According to Gehlken, the unpublished variants often mention things such as balances and deficiencies, so it is possible that these texts are scribal notes that led to the figuring out of balances. Whatever the case may be, all these texts clearly contemplate two sets of numbers for rams, and rams, of course, would have the widest variance between the projected and actual numbers in the herd (as only a few were actually needed to impregnate the ewes). As Gehlken points out (*ibid.*), the first number for rams (i.e., the one included in the *ina pan* total) is always significantly smaller than the second (50 vs. 329 in UCP 9/1, 40:1; 50 vs. 380 UCP 9/1, 40:11; 30 vs. 280 UCP 9/1, 40:21), whereas in the one case that second numbers are given for ewes and female lambs (UCP 9/1, 40:2-3) the first number is significantly *larger* than the second. In addition to these, other texts (VAS 20 59, VAS 20 115, VAS 20 116, VAS 20 118[?], VAS 20 119) mention in the same context copious amounts of male lambs, wool, wages (VAS 20 115:19, VAS 20 116:12), and *rēhus*, but these texts are so broken that they are unusable as such. They appear to be dealing with extractions from the external herds. Hopefully this line of research will prove fruitful in the future with publication of new texts.

example, YOS 17 75⁸¹ lists the intake of animals from members of the external management. In that text, the number of animals brought by each herdsman to the internal management was not large, ranging from 10 to 24 animals per herdsman. In addition to these, some administrative receipts mark the delivery of small amounts of livestock from the external management. For example, TCL 13 171, the heading of which reads, *parrū kalūmū ša nāqidū ana sattukki ibbakūnu Ululu UD.23.KAM MU.5.KAM Kambuzia šar Bābili šar mātāti*, “male *parru* lambs and male lambs that the herdsmen will bring in for sacrifices on the twenty-third day of the month VI (Ululu), fifth year of Cambyses, king of Babylon, king of lands.” The text then divides into three columns: one for *parru*, one for *kalūmu* and one (although not labeled) for PN, that is, for the names of the herdsmen. Each entry lists the number of either *parru* or *kalūmu* lambs for each herdsman to deliver. The numbers are subtotalled in lines 24 and 43, and the text describes these subtotals as *ša Arad-Bēl* and *ša Zērija* respectively, naming two well-known herd supervisors. There is a total of thirty-six herdsmen listed (eighteen per herd supervisor), some of whom appear in other texts.⁸² The number of lambs per herdsman is very small, usually less than ten (the exceptions being lines 6, 18, 21, 26, 28, and 39), and some as low as one or two. The total number of animals brought in is 38 *parru* lambs and 217 *kalūmu*. Thus, although there is little direct documentation about the transfer of animals from the external to the internal management, most of what is known does in fact confirm that the herdsmen made intermittent deliveries of small numbers of animals over a period of time, and not large deliveries at one time.

⁸¹ See here, Chapter Four, p. 156.

⁸² There are not many connections, as most of the patronyms are broken or non-existent: Hašdija/Nabū-mušētiq-uddē (line 8) is found in YOS 7 39:18 and YOS 7 83:6; Nidintu (line 29) in YOS 7 39:48; and Talim (line 35) in YOS 7 39:46.

Small deliveries of animals would not have decreased most herdsmen's projected balance. However, there are documented occasions when herdsmen delivered large numbers of animals to the temple over a short period of time. The obverse of YOS 7 143 (Chapter Four, pp. 147ff.), lists sheep and goats taken at shearing time in months IV and V (Du'uzu and Abu) of the third year of Cambyses. The first section gives a total of 332 animals from (line 14!) *nāqidū ša qāt Arad-Bēl aplišu ša Šarru-kīn*, and the second section lists a total of 300 animals from (line 16!) *nāqidū ša qāt Zērija aplišu ša Nanā-ēreš*. Yet the final lines (17-21!) of the text read: *naphar 102 ša Innin-šuma-uṣur apil Ibnâ Balātu apil Rēmūtu u Anu-bāni-ahi apil Šulaja ... naphar 59 <<šá>> šēni ša URU.Tagritenu ša Nabû-nāṣir aplišu ša Lāqīpu*, “a total of 102 (animals) from Innin-apla-uṣur/Ibnâ, Balātu/Rēmūtu and Anu-bāni-ahi/Šulaja ... (and) a total of 59 (animals) from the village of Tagritenu from Nabû-nāṣir/Lāqīpu.” This first group of herdsmen appears again in YOS 7 160, in which they swear that (lines 7ff.):

kî adi UD.1.KAM ša Tašrītu 200 kalūmū ultu qabēni nib<ba>kamma ana sattukki ša Bēlti ša Uruk ninandinu u adi qīt ša Arahsamna 100 kalūmū nib<ba>kamma ninandinu

By the first day of month VII (Tašrītu) we will bring in 200 male lambs from our fold and give (them) for *sattukki* offerings of the Lady of Uruk, and by the end of month VIII (Arahsamna) we will bring in and give 100 (more) male lambs.

YOS 7 143 reports that the Eanna collected 102 animals from these three people in the fourth and fifth months of the third year of Cambyses. Then, YOS 7 160 records a further obligation for the same three to deliver 300 more animals in the seventh and eighth months of the same year. Thus, over 400 animals were due from the same three

people (acting together) over a five-month period. If each member of this group contributed equally to the total, then he would have delivered 34 sheep toward the total in YOS 7 143, around 66 sheep toward the total of the first obligation in YOS 7 160, and around 33 sheep toward the second obligation recorded in that text. It is not clear whether we should consider these herdsmen as a group or individually, and, moreover, we do not know the size of the herd (or herds) at the time of the conveyances. That notwithstanding, either a 402 animal deduction from one large herd, or an over 130 animal deduction from each of three smaller herds is larger than the standard deliveries marked in the administrative texts discussed above. A payment of 402 animals in one year would have erased or significantly lowered almost every entry in Table 3.2 and almost every entry in YOS 7 39 and 83. A payment of 130 animals would have erased over half the balances in Table 3.2.

Similar examples are unknown to me. This may be because these herdsmen do not act under a herd supervisor. Although most of the evidence indicates that small numbers of animals constituted the regular type of delivery from a herdsman to the temple, this aspect of the relationship between the two regimes of management remains poorly documented. The Eanna obligated the herd supervisors to arrange for delivery of animals to a specific place by a specific time. The obligations either specify that the animals will come from a herd supervisor's own balance and the balance of his herdsmen (TCL 13 162), from the balance of his herdsmen alone (YOS 7 123), from the herd supervisor without any mention of a balance (AnOr 8 67), or from the sheep and goats under the responsibility of a herd supervisor's herdsmen (YOS 7 127). Thus, it appears that the organization for the extraction of animals took form at the level of the herd supervisors,

and it was left to them to arrange delivery of the required numbers from their herdsmen. The nuts and bolts of the operation—e.g., large versus small deliveries, methods of extraction—will most likely remain undocumented.

II.E. Commutation of Balances

In addition to evidence for the reduction of a balance by the actual conveyance of large numbers of animals, there is also evidence that a balance in sheep and goats could be reduced or paid off with other property. A variety of text types mark the transfer of a herdsman's movable and immovable property to the Eanna on account of, or in lieu of, a balance in sheep and goats and/or animal fiber. We shall first examine the textual evidence in detail, and then proceed to a discussion of *why* a herdsman may have negotiated a balance in sheep and goats with other property. That is, did the herdsmen commute—or perhaps were they persuaded to commute—their balances as a routine matter of business, or did such commutations result from the confiscation of property on account of nonpayment, bad-faith negotiations, or recalcitrance?

We begin by examining YOS 7 164, a text recording the conveyance of two boys to the Eanna in lieu of an outstanding balance in sheep and goats, wool and goat hair.

YOS 7 164

Uruk (Eanna)

Cambyses

22-IV-04

obv.

1. *^{md}AG-DU-DUMU.UŠ ù ^{md}EN-LUGAL-ŠEŠ DUMU.ME šá ^mŠEŠ-ia-a-li-du*
 2. *i-na ^mhu-ud lib-bi-šú-nu ^mki-i-^dUD DUMU 5 MU.AN.NA.MEŠ*
 3. *ù ^{md}15-ŠEŠ-SUM-na DUMU 4 MU PAP 2-ta LÚ-ut-ta-šú-nu*
 4. *a-na 2 1/2 MA.NA KÙ.BABBAR ^mna ŠÀ 2/3 MA.NA 3 GÍN bit-qa KÙ.BABBAR a-na 2 GÚ.UN 7 1/2 MA.NA [SÍK].HI.A*
 5. *1 GÍN bit-qa šá 11 1/3 MA.NA SÍK.ÙZ 1 MA.NA 19 GÍN KÙ.BABBAR šá 79 ^me-e-nu*
 6. *PAP 2 MA.NA 3 GÍN 4-tú KÙ.BABBAR ŠÁM U_g.HI.A SÍK.HI.A ù SÍK.ÙZ*
 7. *re-e-hi šá MU.4.KAM ù 1/3 MA.NA 7 GÍN 3 IGI.4.GÁL.LA.ME 2 GÍR-e KÙ.BABBAR*
 8. *a-na 1 GÚ.UN 24 MA.NA SÍK.HI.A i-na re-hi-šú-nu šá ul-tu*
 9. *MU.1.KAM a-di MU.3.KAM PAP 2 LÚ-ut-ta-šú-nu a-na 2 ½ MA.NA KÙ.BABBAR*
 10. *a-na 79 ^me-e-nu 3 GÚ.UN 31 1/2 MA.NA SÍK.HI.A*
- lo.e
11. *u 11 1/3 MA.NA SÍK.ÙZ i-na re-e-hi šá ul-tu MU.1.KAM*
 12. *a-di MU.4.KAM ^mka-am-bu-zí-ia LUGAL TIN.TIR.KI LUGAL KUR.KUR*
- rev.
13. *a-na NÍG.GA É.AN.NA id-di-nu pu-ut LÚ.se-^mhu-ú ù LÚ.pa-qir-a-nu*
 14. *šá ^mna UGU ^mki-i-^dUD ù <^m>15-ŠEŠ-MU il-la-a*
 15. *^{md}AG-DU-DUMU.UŠ ù ^{md}EN-LUGAL-ŠEŠ na-šu-ú 1-en pu-ut 2-i na-šu-ú*
 16. *i-na ú-šu-uz-zu šá ^{md}AG-DU-DUMU.UŠ LÚ.ŠÀ.TAM É.AN.NA*
 17. *DUMU-šú šá ^mna-di-nu DUMU ^mda-bi-bi ^{md}AG-ŠEŠ-MU LÚ.SAG.LUGAL*
 18. *LÚ.EN pi-qit-ti É.AN.NA LÚ.mu-kin-nu ^mIR-^dAMAR.UD DUMU-šú šá ^mNUMUN-ia*
 19. *DUMU ^me-gi-bi ^{md}30-APIN-eš DUMU-šú šá ^{md}AG-MU-SI.SÁ DUMU ^mDÙ.DINGIR*
 20. *^{md}AG-DUMU.UŠ-MU DUMU-šú šá ^{md}EN-DIN-iṭ DUMU LÚ.šá-MUN.<HI.A>-šú ^mEN-KAR-^dAG*
 21. *LÚ.SAG.LUGAL ù ^{md}KUR-GAL-LUGAL.ŠEŠ LÚ.se-pir-ri šá ^mna É.AN.NA paq-du*
 22. *^mna-di-nu DUB.SAR DUMU ^me-gi-bi ^mIR-^dAMAR.UD DUB.SAR*
 23. *DUMU ^{md}EN-DUMU.UŠ-ú-^msur ^{md}AMAR.UD-ŠEŠ-ir DUB.SAR DUMU ^mši-gu-ú-a*
- u.e.
24. *UNUG.KI ITI.ŠU UD.22.[KAM MU]4.KAM ^mka-am-bu-zí-ia*
 25. *[LUGAL TIN.TIR].KI LUGAL KUR.KUR*

This text was originally edited by Mariano San Nicolò, "Parerga Babylonica III," *ArOr* 4 (1932): 182f.

Line 9 The total amount of silver actually mentioned in the text is 2 mina 31 1/12 shekels (2 mina 3 $\frac{1}{4}$ shekels + 1/3 mina 7 5/6 shekels). This is either a scribal error or a simple rounding down of the number.

(1-4) Nabû-mukîn-apli and Bêl-šarra-uşur, sons of Ahî-jâlidu, of their own free will (lit. in the happiness of their heart), sold Kî-Šamaš, a five-year old boy, and

Ištar-aha-iddina, a four-year old boy, a total of two of their slaves, to the Eanna (lit. to the assets of the Eanna [line 13]) for 2 1/2 mina of silver, including:

(4-7) 2/3 mina 3 1/8 shekels of silver for 2 talents, 7 1/2 mina of wool; 1 1/8 shekel for 11 1/3 mina of goat hair; and 1 mina 19 shekels for 79 sheep and goats—a total of 2 mina 3 1/4 shekels of silver (is) the price of sheep and goats, wool, and goat hair, the balance of the fourth year.

(7-9) And 1/3 mina 7 5/6 (3/4 + 2/24) shekels of silver for 1 talent, 24 mina of wool for their balance which is from the first year to the third year.

(9-12) A total of 2 slaves for 2 1/2 mina of silver (is) for 79 sheep and goats, 3 talents, 31 1/2 mina of wool and 11 1/3 mina of goat hair, for the balance of the first to the fourth year of Cambyses, king of Babylon, king of lands.

(13-15) Nabû-mukîn-apli and Bêl-šarra-uşur take responsibility for persons bringing unlawful claims and creditors that arise with respect to Kî-Šamaš and Ištar-aha-iddina. One guarantees the other.

(16-18) (This obligation was formulated) in the presence of Nabû-mukîn-zêri/Nâdinu//Dâbibî, the chief administrator, and Nabû-aha-iddin, the royal supervisor of the Eanna.

(18-21) Witnesses: Arad-Marduk/Zêrija//Egibi; Sîn-ēreš/Nabû-šumu-lîšir//Ibnili; Nabû-apla-iddin/Bêl-uballit//Ša-tâbtîšu; Bêl-etêri-Nabû, the courtier; and Amurru-šarra-uşur, the (alphabet) scribe appointed in the Eanna.

(22-23) Nâdinu//Egibi, scribe; Arad-Marduk//Bêl-apla-uşur, scribe; Marduk-nâşir//Šigûa, scribe.

(24-25) Uruk, the twenty-second of month IV (Du'üzu), the fourth year of Cambyses, [king of Babylon,] king of lands.

Nabû-mukîn-apli/Ahî-jâlidu appears in Table 3.2, number 17. It thus appears that from the fourth year of Cyrus until the fourth year of Cambyses this herdsman gradually paid down his balance, from 180 animals in Cyrus 4 (YOS 7 39), to 144 at some point at the end of Cyrus' reign or the early reign of Cambyses (YOS 7 83), to 79 in Cambyses 4 (YOS 7 163), and then, according to the terms of YOS 7 164, to zero. Wool, as well,

follows a similar pattern: from 370 mina, to 145, to 127.5, to zero.⁸³ The Eanna, then, accepted two boys in lieu of a final payment of animals and fiber.

Other evidence for the commutation of balances in sheep and goats is not as precise. YOS 7 7: 43f. mentions 1 *lītu ša ina rēhi ša sēni ina qāt Nanā-iddin apil Arad-Innin abkata*, “one cow which was brought in by Nanā-iddin/Arad-Innin for (i.e., against) an outstanding balance of sheep and goats.” See also Dillard NB Lewis Coll.: FLP 1581 (see here, pp. 78f.). Also, in YOS 6 221 a herdsman’s female slave is turned over to the chief administrator and royal supervisor of the Eanna. The text states (lines 12ff.): *amēlūtu kūm rēhi ša muḥhi Nabû-mušētiq-uddê ana Eanna abkat* “the slave was brought (in) to the Eanna lieu of the outstanding balance (line 5: in sheep, goats, and cattle) debited against Nabû-mušētiq-uddê.” AnOr 8 58 refers to a house that was transferred to the Eanna in lieu of an outstanding balance of sheep and goats (1ff. *bīt Bēl-ahhē-iddin aplišu ša Gudādū ša kūm rēhi ša sēni ša muḥhišu ana Eanna našā*, “the house of Bēl-ahhē-iddin/Gudādū, which was transferred to the Eanna in lieu of a balance in sheep and goats which was due from him”), and AnOr 8 57:3 mentions a house that was transferred to the Eanna (*ana Eanna našā* [line 5]) *ina rēhi ša urīṣi enzēti u ṣallāni makkūr DN*, “for (i.e., against) a balance in he- and she-goats, and hides(?), the property of DN.” Also, in AnOr 9 15 a man sells real estate for one mina of silver, which he gives to the Eanna against a balance in sheep and goats and wool (lines 11ff.), and in AnOr 8 15 a man turns over a date orchard against a balance in sheep and wool. YOS 7 184:1f. marks the payment of 10 shekels of silver *kūm tīrūti ša PN₁ PN₂ u PN₃ ana PN₄ nāqidi ša sēni ša Ištar*

⁸³ This is, of course, not certain, as the only way the gradual paying down of a balance can be indisputably established is by knowing the balances of a consecutive set of years.

Uruk iṭṭirû ina rēhi ša sēni ša ina muḥhi PN₄ PN₁ ana makkūr Eanna mahir, “in compensation for a beating which PN₁, PN₂ and PN₃ gave to PN₄ the herdsman of the Lady of Uruk—(the silver) has been received (as compensation) from PN₁ for the assets of the Eanna for (lit. from, i.e., crediting) the balance in sheep and goats which is due from PN₄.⁸⁴

Apart from YOS 7 164, not one of these texts mentions the size of the balance reduced or expunged by the conveyance of other property. In YOS 6 220 one cow and one heifer are equal to 25 sheep and goats: (lines 10f.) *naphar 40 sēnu 1 ÁB.「GAL(!) 11 sāhirtu* (ÁB.NIGIN) *ana 25 sēnu PAP-ma 65 sēn(u)*, “a total of 40 sheep and goats, one cow and one heifer for 25 sheep and goats, for a grand total of 65 sheep and goats,” but we do not know whether this is a general equivalency or relevant only in this text (nor for that matter do we know whether a heifer carried the same value as a cow). A possible injunction against the substitution of oxen for a balance in sheep and goats is mentioned in YOS 3 41:14ff.: *alpū* (GU₄.ME) *ša ina qāt Mannu-kî-Dāda abkūnu ina rēhišu ša lātu* (ÁB.GUD.HI.A) *ša kutalli ina lē’i ša rēhāni ana muḥhišu šaṭru ūmu ullū šatammu ul imangur umma ina rēhi ša sēn(i) ul taṣṭṭara ina rēhi ša lātu* (ÁB.GUD.HI.A) *ša kutalli ana muḥhišu šuṭrašunūtu*, “the oxen which were brought in by Mannu-kî-Dāda against his outstanding balance of cattle were recorded as a substitution(?) under his account on

⁸⁴ On the use of *mahāru* here, see Chapter Four, p. 140 n. 31. In addition to these, AnOr 8 56 mentions a female slave who claims (line 5) *amtū ša Lāqīpu/Abujādī nāqīdu ša rēhi ša Bēlti ša Uruk ina muḥhišu anāku*, “I am the female slave of Lāqīpu/Abujādī the herdsman who has a balance of the Lady of Uruk due from him.” From the text it is not certain, but likely, that this slave was being held in the Eanna on account of her owner’s outstanding balance. Other texts recording the conveyance of property to the Eanna in lieu of debts are: YOS 7 130 (a slave, although there is no specific mention of livestock or livestock products), and YOS 6 207, on account of a balance in barley. In TCL 13 165 three well-known herdsmen are commanded to supply a high quality ass (line 5) *ina rēhi ša muḥhišunu*, “from the balance which is debited against them.” Certainly *rēhu* here refers to a balance in sheep and goats (or, perhaps, cattle) and not in asses. See also YOS 6 219, in which three female slaves are held *kūm rēhi ša ina muḥhi PN*, “in lieu of a balance which is due from PN.”

a register of (sheep and goat) balances—but the (Eanna's) chief administrator would never agree to this, (saying) ‘you (pl.) should not record (them) against (his) outstanding balance of sheep and goats, record them to his credit as a substitution(?) against the outstanding balance of cattle.’”⁸⁵

Finally, two texts mark the constraint of a debtor for a balance in sheep and goats.

The first is TCL 13 179:

⁸⁵ The *lātu ša kutalli* are also mentioned in TCL 9 120:16ff., but the meaning is unclear there as well.

TCL 13 179
Uruk (Eanna)

Cambyses
xx-xx-02

obv.

1. [^{md}*dan-nu*]-ŠEŠ.MEŠ-šú-DÙ A-šú šá ^f*na-na-a-ši-nin-ni* LÚ.*qal-la*
2. šá ^{md}*na-na-a-ŠEŠ-MU* A-šú šá ^{md}U.GUR-*ina-SÙH-SUR* šá *re-e-ḥu* šá *se-e-nu*
3. NÍG.GA ^dINNIN UNUG.KI *i-na muḥ-ḥi-šú* šá *i-na* ITI.NE MU.1.KAM
4. ^m*kam-bu-z-i-a* LUGAL TIN.TIR.KI LUGAL KUR.KUR ^{md}AG-ŠEŠ-SUM-*na*
5. LÚ.SAG.LUGAL LÚ.EN *pi-qit-tum* É.AN.NA *ul-tu* É ^fú-*bar-tum* DUMU.MUNUS-*su*
6. šá ^{md}*na-na-a-ŠEŠ-MU* *a-na* NÍG.GA É.AN.NA *i-bu-ku-ma*
7. *kak-kab-tum la iš-mi-tu-uš* ù *ina muḥ-ḥi* GIŠ.DA šá ^dGAŠAN šá UNUG.KI
8. *la iš-ṭu-ru-uš* ù ^fú-*bar-tum* *taq-bu-ú um-ma*
9. *nu-du-nu-ú-a šu-ú ár-ki* *i-na* ITI.KIN UD.5.KAM MU.3.KAM
10. ^m*kam-bu-z-i-a* LUGAL TIN.TIR.KI LUGAL KUR.KUR ^fú-*bar-tum*
11. *i-bu-kam-ma* ^{md}AG-ŠEŠ-MU LÚ.SAG.LUGAL LÚ.EN *pi-qit-tum* É.AN.NA
12. *iq-qab-ba-áš-a-šú um-ma* IM.DUB *nu-du-nu-ú lu-ú*
13. IM.DUB KI.LAM KÙ.BABBAR šá ^{md}*dan-nu-ŠEŠ.MEŠ-šú-ib-ni*

rev.

14. *kul-lim-in-ni-ma i-ṭna pa-ni l-ka lu-maš-šar-uš* ^fú-*bar-tum*
15. *niš* ^dGAŠAN šá UNUG.KI *u* ^d*na-na-a ina UKKIN ta-az-ku-ru*
16. *ki-i* ^{md}*na-na-a-ŠEŠ-MU AD-ia* ù ^fin-na-tu-[ú-a] AMA-a
17. ^{md}*dan-nu-ŠEŠ.MEŠ-šú-DÙ a-na nu-du-nu-ú ù a-na* [... *la(?) id-di*]-nu-nu
18. IM.DUB *nu-du-nu-ú* IM.DUB KI.LAM KÙ.BABBAR [šá ^{md}*dan-nu-ŠEŠ.MEŠ-šú-DÙ*]
19. *ina* É-ia *i-ba-áš-šu-ú* ù *mim-ma ra-šú-tu* [...] ^fx ^fx [...]
20. šá ^{md}15-DU-DUMU.UŠ LÚ.DAM-ia *ina U[GU ...]* ^fx [...]
21. LÚ.*mu-kin-nu* ^mIR-^dU.GUR A-šú šá ^mki-na-a [... DUMU-šú]
22. šá ^{md}UD-MU-DU A LÚ.*man-di-di* ^mib-na-a A-šú šá ^m[...]
23. [^{md}]na-na-a-ŠEŠ-MU A-šú šá ^m[...]
24. [... A]-šú šá ^mI-^dAMAR.UD A ^m[^fx] [...]
25. [...] ^fx ^fmuk-ki-ia A [...] ^din-nin-PAP
26. [...] -ra A-šú šá ^{md}in-[nin ...]
27. [...] UNUG.KI [...]
28. [... ^mka-am-bu-z]i-ia LUGAL TIN.TIR.KI [LUGAL] KUR.KUR

An edition of this text appears in Ellen Whitley Moore, *Neo-Babylonian Business and Administrative Documents* (Ann Arbor: University of Michigan Press, 1935), no. 179.

(1-9) Dannu-ahhēšu-ibni/^fNanā-šininni, the slave of Nanā-aha-iddin/Nergal-inna-tēšî-ēṭir who owes a balance of sheep and goats, the property of Ištar of Uruk, (the slave) whom in month V (Abu), the first year of Cambyses, king of Babylon, king of lands, Nabû-aha-iddina the royal supervisor of the Eanna took from the house of Ubartu, the daughter of Nanā-aha-iddin as the property of the Eanna, but he did not brand him with a star and did not book him on the ledgers of the Lady of Uruk, and (about whom) Ubartu said the following: “that (slave) is my dowry.”

(9-14) Later, on the fifth day of month VI (Ulūlu) of the third year of Cambyses, king of Babylon, king of lands, he brought Ubartu in and Nabû-aha-iddin the royal supervisor of the Eanna spoke to her as follows: “show to me the dowry tablet or the tablet of purchase of Dannu-ahhēšu-ibni so that I may release him to you.”

(14-20) Ubartu took the oath of the Lady of Uruk and Nanā in the assembly that: “Nanā-aha-iddin my father and Innatā my mother [gave me(?)] Dannu-ahhēšu-ibni for my dowry and [...]; the dowry tablet and the tablet of sale of [Dannu-ahhēšu-ibni] are not in my house, but [*there are no(?)*] other claims ... of Ištar-mukīn-apli, my husband, ... [...]”

(21-26) Witnesses: Arad-Nergal/Kīnā//[...], [...]//Šamaš-šuma-ibni//Mandidu; Ibnâ/[...]/[...]; [...]//Na'íd-Marduk//[...], [...]//Mukkēa//[...]; Innin-nāṣir [...]; [...]//Inn[...]

(27-28) [...] Uruk [Month x, day x, year x of Camby]ses, king of Babylon, [king] of lands.

In addition to this text, YOS 7 144:1f. mentions a certain Gimillu/Innin-šuma-uşur *ša kūm rēhi ša Bēlti ša Uruk ina Eanna ʂabtu* “who is held at the Eanna in lieu of a balance (due) the Lady of Uruk.”⁸⁶ His wife takes responsibility for him, and if he flees she will be held responsible for his balance (lines 8f. *kî Gimillu ana aśar ʂanāmma ittalku Tabluṭu rēhi ša muḥhi Gimillu māršu ša Innin-šuma-uşur ana makkūr Eanna tet[ter]*).

These texts seem to confirm that the transfer of property to the Eanna in lieu of outstanding debts was not a matter of course, but the real confiscation of property by the Eanna. However, as is the case with most legal texts of this sort, the circumstances surrounding the particular incidents are unknown, and the strong language of the texts (e.g., that the royal supervisor of the Eanna “took” the slave, that Gimillu was “held” at the Eanna) should perhaps not be understood literally.

⁸⁶ This text does not specifically mention balances in sheep and goats, and Gimillu/Innin-šuma-uşur is not known to me from other texts associated with livestock management.

Can we discern what, as a general rule, occasioned these exchanges and commutations? That is, did they result from routine matters of business, or did they stem from the confiscation of property on account of nonpayment, bad-faith negotiations, or recalcitrance? This line of inquiry invites speculation, but it is not baseless. A *nāqidu ša rēhi* is a herdsman who controls some of the Eanna's live assets in sheep and goats. His *rēhu*—certainly the numerical difference between those animals projected to be with him and those actual animals extracted from the herd by the temple—increased with the projected growth of the herd and periodic additions of new animals to it. It decreased by the payment of animals, sometimes in extraordinary numbers, to the Eanna, and by the transfer of other property to the temple in lieu of (at least part of) such a balance. In bookkeeping terms, *rēhu* was an asset to the Eanna and a liability to its herdsmen, but in reality, as I have shown, the relationship between the Eanna and its herdsmen was more complex than simply determining the number of animals that a herdsman owed the Eanna at any particular time. In real terms the Eanna's productive capital (female animals) remained with the herdsmen and they negotiated the apportionment of the yearly consumables, leaving the herdsmen to sell or trade the uncollected surplus.

Given this, I see no incentive, economic or otherwise, for a herdsman freely to commute or strive to lower a balance in sheep and goats with other property. It was certainly not the case that the herdsmen were expected to pay back the animals that the Eanna put at their disposal. Instead, the Eanna and its herdsman enjoyed a symbiotic economic relationship, each of them benefiting from the proper care and growth of the herd. I therefore see no attached benefit for a herdsman to buy out of his relationship with the Eanna.

Alternatively, one can plainly see the potential for abuse in this relationship. The economic benefit of placing one's productive capital in ewes at the disposal of a manager and remunerating that manager with a percentage of the increase, instead of a salary, is that the manager also benefits from the successful propagation of the herd; the trade-off is that it also benefits the manager to misreport the size of the herd, hold animals back, or find other ways to manipulate the herd to his advantage (the payment of a salary invites a different set of benefits and trade-offs). This is only abetted by the peripheral and itinerant nature of sheep and goat rearing. Thus, I believe that the commutation of a balance in sheep and goats was almost certainly not a routine matter of business. Instead, such commutations occurred on account of a herdsman's inability or unwillingness to meet negotiated installments. In effect, I believe the Eanna confiscated property to reduce or pay off the balance of a herdsman who went afoul of the system. Although it is not made explicit in the text, this is almost certainly the case in YOS 7 164 (see here, pp. 85f.) in which exact equivalencies are given between the outstanding balance and the confiscated property. On the other hand, it is also possible that the Eanna seized property as collateral in order to ensure (or perhaps compel) the handing over of animals from a recalcitrant herdsman. Again, it is not explicit in the texts, but this may be the case in the many references above in which property is seized *kūm* (in lieu of) an undisclosed balance.

III. The Herd Supervisors (*rab būlis*)⁸⁷

A herd supervisor occupied a unique position. He managed (and was promoted from) a group of herdsmen affiliated with the Eanna by contract, but upon promotion he appears to have entered the upper ranks of temple society. He was not *primus inter pares*. Herd supervisors appear as witnesses in legal texts, whereas herdsmen do not,⁸⁸ and in YOS 6 77:10 the herd supervisor Innin-šarra-uṣur/Nergal-ušallim//Sîn-leqe-unnninnī appears in list of people called the *ērib būtāti kinalti u mār banî* “temple-enterers, prebendaries, and citizens.”⁸⁹ There is an interesting parallel with the internal management, where the offering shepherd appears as a witness in legal texts, but one never finds his underlings, the shepherds of the sacrificial sheep, in the same position. Van Driel considers the herd supervisors to be members of the external management, but we have no evidence to confirm or refute the notion that they depended solely on their animal holdings for sustenance. I know of no reference to them on ration lists or as prebendaries, but their promotion to the Eanna’s elite suggests that their relationship with the Eanna was not simply contractual.

A herd supervisor’s responsibility encompassed both livestock management and the recruitment of herdsmen for the royal “bow obligation.” At one point four herd

⁸⁷ The full title is *rab būli ša šēni ša Ištar ša Uruk*, “the herd supervisor of the sheep and goats of Ištar of Uruk.” There was not, to the best of my knowledge, a herd supervisor of cattle.

⁸⁸ E.g., YOS 6 78:21.

⁸⁹ On the translation of “prebendaries” for *kinaltu* (*kiništu*) see A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997), 150ff.

supervisors operated contemporaneously, two of whom were from the same family.⁹⁰

Herd supervisors appear in legal texts and in a few administrative notes, and are found in only a few texts before the reign of Nabonidus.⁹¹ Almost all the information on the herd supervisors concerns their position as livestock managers (including those texts associated with the bow obligation).⁹²

The herd supervisor's position as head of a group of herdsmen is explicit in two similar texts, which were drafted about four years apart. YOS 7 39 lists the balances of sheep and goats, wool, and goat hair of sixty-two herdsmen that are described as *ša qāṭ Ibni-Ištar*, “under the control (lit. of the hand) of Ibni-Ištar.” Ibni-Ištar is a well-known herd supervisor. YOS 7 83, a text like YOS 7 39, lists at least forty herdsmen under the control of Arad-Bēl, who is another herd supervisor. As many of the same herdsmen appear in both texts (see Table 3.2, here, p. 74), it appears that they moved from one group to another when a herd supervisor no longer functioned as such. This makes it unlikely that the position was hereditary.

The herd supervisors were the primary organizers of the herdsmen, but the methods and apparatus of that organization are in the main outside of the textual record. For example, we have texts recording the demand for a herd supervisor to have his herdsmen supply animals for offerings, and we have a few texts marking the receipt of animals

⁹⁰ See Kümmel, *Familie*, 49 and 53.

⁹¹ To the best of my knowledge, the only pre-Nabonidus Neo-Babylonian mentions of herd supervisors are YOS 17 11:1f., YOS 17 109:2f., and TBER 66:23f., all of which date to the reign of Nebuchadnezzar II.

⁹² Exceptionally, there is YOS 17 11, a loan of silver by a herd supervisor.

from the herdsmen, but we do not have evidence for how the herd supervisor extracted animals from his underlings. Contrast this with the textual record for the internal management, where the day-to-day movement of animals is marked, and where every animal (and every animal carcass) is accounted for. The difference in documentation results from the different relationships—i.e., contractual versus direct—that the two regimes of management had with the temple.

That being said, any evidence for the responsibilities of the herd supervisors to the temple should be exposed to the fullest extent possible. Herd supervisors most often appear in legal texts obligating them to guarantee the delivery of sheep for sacrifices. Some texts also obligate them to deliver animals to royal feasts.⁹³ An example of the former is TCL 13 162.

⁹³ E.g., AnOr 8 67, GCCI 2 120, and YOS 7 123 and see Mariano San Nicolò, "Zur Verproviantierung des kgl. Hoflagers in Abanu durch den Eanna-Tempel in Uruk," *ArOr* 17/2 (1949): 323-330, and here, Chapter Six, pp. 266ff.

TCL 13 162
Uruk (Eanna)

Cambyses
26-X-03

obv.

1. *a-di UD.1.KAM šá ITI.ZÍZ! MU.3.KAM*
 2. *^mka-am-bu-zि-ia LUGAL TIN.TIR.KI LUGAL KUR.KUR*
 3. *^mNUMUN-ia DUMU-šú šá ^{md}na-na-a-ereš₄-eš LÚ.GAL bu-ú-lu*
 4. *3 ME 55 UDU.ka-lum A MU.AN.NA*
 5. *ina re-hi-šú ù re-e-hi šá LÚ.NA.GADA.ME*
 6. *LÚ.ERÍN.ME ŠU^{II}-šú ib-ba-kam-ma a-na SÁ.DUG₄*
 7. *šá ^dGAŠAN šá UNUG.KI šá ul-tu UD.1.KAM*
 8. *šá ITI.ZÍZ i-nam-din ki-i la i-tab-kam-ma*
 9. *la it-tan-nu hi-ṭu šá LUGAL*
 10. *i-šad-da-ad*
- rev.
11. *ina ú-šu-uz-zu šá ^{md}AG-DU-DUMU.UŠ*
 12. *LÚ.ŠÀ.TAM É.AN.NA DUMU-šú šá ^mna-di-nu DUMU ^mda-bi-bi*
 13. *LÚ.mu-kin-nu ^{md}UD-DU-DUMU.UŠ DUMU-šú*
 14. *šá ^{md}DI.KUD-PAP.ME-MU DUMU ^mši-gu-ú-a*
 15. *^mna-di-nu DUMU-šú šá ^{md}EN-ŠEŠ.MEŠ-BA-šá DUMU ^mši-gu-ú-a*
 16. *^{md}AMAR.UD-na-ṣir DUMU-šú šá ^{md}DI.KUD-PAP.ME-MU*
 17. *DUMU ^mši-gu-ú-a ^mIR-^dAMAR.UD DUB.SAR*
 18. *DUMU-šú šá ^{md}AMAR.UD-MU-MU DUMU ^{md}EN-DUMU.UŠ-ŠEŠ*
 19. *UNUG.KI ITI.AB UD.26.KAM*
 20. *MU.3.KAM ^mka-am-bu-zि-ia*
 21. *LUGAL TIN.TIR.KI LUGAL KUR.KUR*

An edition of this text appears in Ellen Whitley Moore, *Neo-Babylonian Business and Administrative Documents* (Ann Arbor: University of Michigan Press, 1935), no. 162.

Line 1 Moore (*ibid.*) reads the month name in this line as GAN (*Kislīmu*), which is month IX. However, the sign resembles the KAM sign more than the sign for GAN, and I understand it as error by the scribe, who accidentally repeats the KAM from UD.1.KAM and MU.3.KAM in the same line. I emend it to ZÍZ (*Šabatū*), which is month XI. The text dates to the end of AB (*Tebētu*), which is month X. The other date in the text states that the offerings begin in ZÍZ. Therefore, with my emendation, the text is written in month X, having a due date in month XI for offerings that begin in the same month.

(1-10) By the first day of month XI(!), the third year of Cambyses, king of Babylon, king of lands, Zērija/Nanā-ēreš, the herd supervisor, will bring in 355 male yearling sheep from his balance and the balance of the herdsmen under his control and give them for the offerings of the Lady of Uruk, which (begin) on the first day of the month XI (*Šabatū*). If he does not bring in and deliver (them), he will bear the punishment of the king.

(11-12) (This obligation was formulated) in the presence of Nabū-mukīn-apli/Nādinu//Dābibī, the chief administrator of the Eanna.

(13-17) Witnesses: Šamaš-mukīn-apli/Mandānu-ahhē-iddin//Šigūa, Nādinu/Bēl-ahhē-iqīša//Šigūa, Marduk-nāšir/Mandānu-ahhē-iddin//Šigūa.

(17-19) The scribe Arad-Marduk/Marduk-šuma-iddin//Bēl-apla-uşur

(19-21) Uruk, the twenty-sixth day of month X (Tebētu), the third year of Cambyses, king of Babylon, king of lands.

This text refers to the balances both of the herd supervisor and of his herdsmen.

Although the Eanna promoted the herd supervisors from the ranks of the herdsmen,⁹⁴ very little information exists on the animal holdings of any herd supervisor. They certainly did have animals of their own.⁹⁵ The issue of a herd supervisor's animal holdings is fundamental for understanding the nature of his responsibility as head of the herdsmen: to wit, did the temple hold a herd supervisor, as the leader of group of contractors, liable for the balances of his underlings?

In YOS 7 103,⁹⁶ the herd supervisor Arad-Bēl/Šarru-kīn guarantees to bring Innin-aha-iddin/Nabū-ahhē-šullim and Nanā-uşalli/Ardija to the chief administrator and royal supervisor of the Eanna. If he does not fulfill his guarantee, the text states that (lines 9ff.) *[rēhu] ša ina muḥhi[šunu] Arad-Bēl ana makkūr [Eanna] iṭṭir*, “Arad-Bēl will pay to the treasury of the Eanna the balance that is owed by [them].”⁹⁷ The text also adds that

⁹⁴ See Kümmel, *Familie*, 49.

⁹⁵ YOS 7 83, which is a list of balances of the herdsmen under the control of the herd supervisor Arad-Bēl/Šarru-kīn, contains an entry for Arad-Bēl himself (line 35), without any special notation. Moreover, YOS 6 40:20f., a lease of temple land, mentions the sheep, goats, and cattle of the Lady of Uruk under the responsibility of Innin-šarra-uşur the herd supervisor.

⁹⁶ For an edition of the text, see San Nicolò, “Viehwirtschaft V,” 31ff.

⁹⁷ Here, *ana makkūr Eanna iṭṭir* may refer to paying off the balance with other commodities, see here, Chapter Three, p. 60 note 54. In parallel, YOS 7 190 mentions a *rab būli* who takes responsibility for the delivery of cattle to the Eanna; lines 24f. of the text read: *rab būli pūt ḥeṭēri l naši*, “the *rab būli* takes responsibility for payment.” Interestingly, one of the people for whom he is guaranteeing payment is Arad-Bēl/Šarru-kīn, who is a herd supervisor himself.

this obligation is (lines 11f.) *elat rēhānu mahrūtu ša ina muḥhišunu u elat rēhānu ša ina muḥhi Arad-Bēl*, “apart from earlier balances that are owed by them and apart from balances that are owed by Arad-Bēl.” The suretyship guarantee made by one person to deliver another person to the upper-level temple authorities is a common subject in legal texts from the Eanna,⁹⁸ and, in a variety of forms, it is particularly common among texts associated with the Eanna’s livestock management. Innin-ahhē-šullim and Nanā-uṣalli appear as herdsmen under the responsibility of Arad-Bēl/Šarru-kīn in YOS 7 83:11 and 10, respectively. Thus YOS 7 103 would seem to present clear proof that the temple held the herd supervisors responsible for the balances of their subordinate herdsmen. The mention of balances at the end of the text makes it clear that they had to appear before the uppermost temple authorities for that reason.

However, the problem with this interpretation is that all guarantees of suretyship in Neo-Babylonian texts from the Eanna carry penalties of some sort for non-fulfillment. These penalties, which include fines, compensatory service, and the obligation of the guarantor to pay the debt of his guarantee, have more to do with the conditions of suretyship than with the relationship of those involved in the guarantee. The penalty *may* reflect the relationship between the parties to the guarantee (i.e., to pay the amount owed by one’s underling), or it may be expressed in neutral terms (i.e., to pay a fine). Whatever the case may be, it is a penalty for non-compliance in a guarantee of suretyship and should therefore not be a reiteration of a usual obligation between those involved in the surety relationship. The penalty for securing a single guarantee would be ineffectual

⁹⁸ See Raymond Dougherty, “The Babylonian Principle of Suretyship as Administered by Temple Law,” *AJSL* 46 (1930): 73-103.

if the imposition of that penalty is already factored into the relationship between those involved in the guarantee. The fact that the penalty in YOS 7 103 obligates Arad-Bēl to cover the balances owed by his herdsmen may be confirmation that as a matter of course the herd supervisors were not held personally liable for such balances.

This point is reinforced by examining a group of herdsmen who seem to operate outside the control of the herd supervisors. In YOS 7 143, a two-month general audit of animal intake and outlays, the animal intake from the external management is first classified as that from (line 14) *nāqidū ša qāt Arad-Bēl apil Šarru-kīn*, “the herdsmen under the responsibility of (herd supervisor) Arad-Bēl/Šarru-kīn,” and then classified as that from the herdsmen under the control of the herd supervisor Zērija/Nanā-ēreš (line 16). However, the following lines list another set of intake from (lines 17ff.) Innin-šuma-uşur/Ibnâ, Balātu/Rēmūtu, and Anu-bāni-ahi/Šulaja.⁹⁹ It is unknown why these herdsmen operate outside the control of the herd supervisors, but in YOS 7 160 they appear again. In this text they are obligated—under the threat of the punishment of Gobyras—to deliver sheep for offerings. And in YOS 7 43 (see here, pp. 59f.) Anu-bāni-ahi along with Nabû-ahhē-bullit/Ibnâ, and Rēmūtu/Marduk-bēl-ilāni are obligated to bring in and deliver¹⁰⁰ their “balance in cattle, sheep, and goats” (*rēhu ša lāti u šēni*). If they do not meet this obligation, however, the text states (lines 11ff.), *Bēl-ibni māršu ša Kabitija rēhi ā ša lāti* (ÁB.GU₄.HI.A) *u šēni ša MU.6.KAM ša muhhi PN₁ PN₂ u PN₃ ana makkūr Eanna iṭṭir*, “Bēl-ibni/Kabitija will pay the treasury of the Eanna the aforesaid

⁹⁹ Also, in line 20, another group of animals is taken in from Nabû-nāşir/Lāqīpu.

¹⁰⁰ The first section of the text (lines 5-8) actually states, “bring in and brand (the animals),” (*abākuma ... šamātu*); the other sections of the texts (lines 8-11, and 15-19) state that, “they will give the *rēhu* (animals) to the property of the Eanna” (*rēhi . . . ana makkūr Eanna nadānu*), see here, Chapter Three, pp. 59f.

rēhu of cattle and sheep and goats of the sixth year which is debited against (the herdsmen) PN₁, PN₂, and PN₃.” This Bēl-ibni/Kabtija is not a known herd supervisor (nor is he known from other texts in general), but his function here as guarantor parallels that of Arad-Bēl in YOS 7 103. In other words, the obligation to assume the balance owed by the herdsmen did not fall only on the herd supervisors, and was not a usual aspect of their relationship with their herdsmen. Finally, the fact that the herdsmen used their own personal property in lieu of such balances (see here, pp. 84ff.) confirms that they, and not the herd supervisors, bore full responsibility for their balances.

One text associated with livestock managers stipulates that the penalty for noncompliance in a guarantee of suretyship is that the guarantor “will bear the punishment of Cyrus, the king of Babylon and of the lands.”¹⁰¹ This is also commonly found in other surety texts not associated with livestock management.¹⁰² It is also the penalty for non-fulfillment attached to the obligation to deliver animals in TCL 13 162 (here, pp. 97f.), and in every other text of that sort.¹⁰³ This clause appears in a few forms in many other contexts. Most often one finds the *ḥītu ša šarri*, the “punishment of king” or the *ḥītu ša Gūbaru bēl pīhat Bābili u Eber-Nāri*, the “punishment of Gobyras, the governor of Babylon and Across-the-River.” It has been translated a number of ways, but with one of two basic connotations: “He will commit a crime against the king;” or, “he

¹⁰¹ YOS 7 25:8f.

¹⁰² See, for example, YOS 6 151 (bowmen), YOS 6 213, YOS 7 50, YOS 7 94, YOS 7 137, YOS 7 177, YOS 7 178, YOS 7 187, and GCCI 2 103 (for guard duty).

¹⁰³ Similarly, it is also attached to the delivery of ducks and fish, see, for example, YOS 6 108, YOS 7 69, and YOS 7 90.

will suffer the punishment of the king.”¹⁰⁴ I favor the latter. In addition to the punishment of the king or Gobyras, one also finds the *hītu* of “god and the king,” and of “Nabû-šarra-uṣur,” who was most likely the royal supervisor of the Eanna at that time.¹⁰⁵

This expression occurs only in the apodosis of phrases similar to that of the suretyship guarantee: “if PN does/does not do x, he will bear the punishment of the king/Gobyras.” Without any other context it is impossible to discern with confidence why the *hītu ša šarri* appears in some texts and a fine or other type of punishment is used in similar ones. In fact, given these limited contexts, it is difficult to discern *anything* about this phrase apart from a word-for-word translation, which is itself debatable. There has been surprisingly little speculation on the applicability of this often-quoted phrase to the situation in which it occurs.¹⁰⁶

With regard to livestock management, the threat of the punishment of the king is most often used to secure transfers of animals from the herdsmen *via* the herd supervisors either to the temple or to royal feasts supported by the temple. In most cases the Eanna

¹⁰⁴ For example, “he shall suffer punishment by the king” (David Weisberg, *Guild Structure and Political Allegiance in Early Achaemenid Mesopotamia*, Yale Near Eastern Researches, 1 [New Haven: Yale University Press, 1967], 23); “he will bear the punishment of the king,” (Paul-Alain Beaulieu, “New Light on Secret Knowledge in Late Babylonian Culture,” ZA 82 [1992]: 101); PN “will be guilty of a sin against the king.” (Raymond Dougherty, *The Shirkūtu of Babylonian Deities*, Yale Oriental Series Researches 2 [New Haven: Yale University Press, 1923], 54); PN and PN₂ “encourront le châtiment royal” (Francis Joannès, “Les textes judiciaires néo-babyloniens,” in *Rendre la justice en Mésopotamie: Archives judiciaires du Proche-Orient ancien (III^e-I^{er} millénaires av. J.-C.)*, ed. F. Joannès [Saint-Denis: Presses Universitaires de Vincennes, 2000], 205); “werden sie die Strafe des Königs sich zuziehen,” (San Nicolò, “Verproviantierung,” 326); “PN will be guilty of an offence against the king,” Henry Saggs, “Two Administrative Officials at Erech in the 6th Century B.C.,” *Sumer* 15 (1959): 35.

¹⁰⁵ GCCI 1 307:15 (Nbn 11-I-12) dates to a time when a Nabû-šarra-uṣur held that position, see Kümmel, *Familie*, 144. References for the *hītu* of the god and king are found in CAD H s.v. *hītu* (A).

¹⁰⁶ David Weisberg, *Guild Structure*, 24 states that, “[t]he clause, ‘He shall suffer punishment by the king,’ is used where the king’s interests are at stake and are mentioned in the tablet.” To the contrary, although some texts do indeed mention the explicit interests of the king, most do not.

compelled the various members of its immediate personnel to fulfill tasks by controlling the distribution of food or other types of payment—e.g., rations or salaries for the workers and prebendary income and other types of compensation for the elite—in which case, then, payment was drawn from the temple and ostensibly attached to the fulfillment of tasks. In general terms, the Eanna paid them to work (either per day, per unit of work, etc.). The nature of contracting is such that the Eanna's relationship with its external management lacked this economic incentive. The herdsman's sustenance was drawn from the herd itself and no remuneration of which I am aware was attached to the completion of a delivery. There is also evidence that it benefited the herdsmen to hold animals back. Thus, the threat of the *hītu ša šarri*, whatever it may have been in function, *vis-à-vis* the external management stood in place of the usual institutional economic incentives to compel the completion of a task.

That the threat of punishment is used to compel the completion of a task is not in itself significant, as many texts from the Eanna threaten a fine or some other type of punitive measure as a check against non-fulfillment.¹⁰⁷ The significance lies in the use of

¹⁰⁷ In the few legal texts that deal with livestock management before the reign of Nabonidus, punishments are usually fines (e.g. YOS 17 30:5ff., GCCI 1 15:11f. and Dillard NB Lewis Coll.: FLP 1528:10f.). Additionally, AnOr 8 28 (Nbk 25-IV-12) seems to indicate that if a Nabû-zêra-iddin does not bring forth a particular person by a particular time he will be subject to a fine in accordance with a herding contract with the Eanna (lines 9ff: *la it-tab-kám-ma la it-tan-nu a-ki-i ú-il-tim šá še-e-nu šá ina muḥ-hi dAG-NUMUN-MU e-li-tum še-e-nu tam-lit ú gi-za-a-ta a-na dGAŠAN šá UNUG.KI i-nam-din*, “if he does not bring (him) forth and give (him), according to the promissory note regarding the sheep and goats drawn up to the debit of Nabû-zêra-iddin, he will pay sheep and goats, increase, and wool yield to the Lady of Uruk.” Also, a similar note, CT 55 462 from the Ebabbar archive of Sippar (see da Riva, *Ebabbar*, 197 for an edition) where a decurion is to bring in 32 sheep and goats, called his deficiency (*miṣtu*). The penalty for non-fulfillment (lines 8ff.) is that he must render his herd, increase, and shearings (*U_g.UDU.HI.A talittu u gizzatu*) to the god. In other words, as I read it, in the case of non-compliance this herdsman was to lose his animals, thereby relinquishing his relationship with the Ebabbar. See also here, Chapter Three, p. 72 note 74, which discusses TCL 12 18. Moreover, a standard—and severe—punishment existed for the misappropriation of temple animals, which was to pay the temple thirty animals for every one unaccounted for, see here, Chapter Three, pp. 121ff.

royal/satrapal authority to enforce compliance in these essentially intra-temple transactions. That is to say, why is it the punishment of the king or Gobyras, and not the punishment of the Eanna's chief administrator or the royal supervisor of the Eanna (as it is in at least one early case unrelated to livestock management, GCCI 1 307)? Or, for that matter, why indeed do these texts not invoke a fine or compensatory service in order to compel fulfillment?

My contention is that threat of royal/satrapal authority is related to—in fact, it is the practical application of—the royal mandate under which some members of the external management held the Eanna's animals.¹⁰⁸ The mandate is made explicit in YOS 6 155, in which the animals are granted to a herdsman *ina qibīt Bēl-šarra-uṣur mār šarri*, “at the command of Belshazzar, the crown prince.” The continued royal interest in the system is also manifest in AnOr 8 43, in which the chief administrator and royal supervisor of the Eanna tell three herd supervisors that (lines 15ff.) *amat Gūbaru šî attunu nap̄har nāqidī ša rēhi ša muh̄hikunu ittikunu tabbaku ana pan Gūbaru ittini tallaku*,¹⁰⁹ “this is the command of Gobyras: you (pl.) will bring in with you (pl.) all the herdsmen with balances that are owed by you (pl.) and go to Gobyras with us.” There is also evidence that Gobyras ordered a head-count of the Eanna's livestock. In AnOr 8 61 some herdsmen take an oath that they will not hide any animals (from the inspectors), and the text continues that (lines 17ff.) *ina ūmu mukinnu lu bātiqū uktinnūšunūtu hītu ša šarri išaddadu*, “when a witness or informer proves them guilty, they will bear the punishment

¹⁰⁸ See also here, Chapter Six, pp. 262ff.

¹⁰⁹ The expected forms of the verbs in this text are *tabbakā* and *tallakā*, for the second-person common plural. Although the meaning is clear, I cannot account for the writing as such.

of the king.” The mandate of the royal administration to lease the Eanna’s herds, and Babylon’s continued interest in the system, meant in practice that the exploitation of those herds fell under royal jurisdiction at some level. Hence the threat of the punishment of the king or satrap is a sanction against the failure of herding contracts and attached responsibilities mandated by the royal administration. Why the royal administration may have been guaranteeing and enforcing herding contracts is discussed here, Chapter Six, pp. 262ff.

What, then, constituted the responsibility of the herd supervisors? As we have seen, the uppermost temple management sent orders to the herd supervisors to deliver animals both to the temple and to various functions of the crown. These orders range from the very specific (e.g., TCL 13 162, which lists the number and type of animals to be delivered) to the somewhat vague (e.g., YOS 7 123:4f. mentions “young male goats and he-goats,” without specification of number and YOS 7 127:4 mentions male lambs, again without specification of number). Although the temple issued orders to the herd supervisors for delivery of animals and herdsmen, all bookkeeping centered around the herdsmen and their holdings. The herd supervisors also negotiated orders from the temple to muster and deliver their herdsmen for various purposes. This aspect of the herd supervisors’ responsibility is particularly important in dealing with the “bow obligation,” a requirement of service to the crown for which the herd supervisors recruited and maintained control over their herdsmen (see here, Chapter Five). The temple also charged the herd supervisors with mustering their herdsmen for seemingly non-military purposes, such as that mentioned in AnOr 8 43 (see here, p. 104). It is quite likely that the responsibility of mustering and perhaps commanding the herdsmen as bowmen

corresponded to the responsibility of mustering and commanding the herdsmen as herdsmen. This suggests that a herd supervisor's main task was to take commands from the uppermost temple management and to carry them out on the ground.

The relationship between the temple management, the herd supervisors, and the herdsmen is further exposed in YOS 7 163, a unique text the actual function of which remains obscure.

YOS 7 163
Uruk (Eanna)

Cambyses
14-VI-04

obv.

1. $márra-bi$ A-šú šá $mgu-da-du$ LÚ.NA.GADA šá $še-e-nu$
 2. šá ŠU^{II} $m̄IR-dEN$ A-šú šá $mLUGAL-DU$ šá $m̄IR-dEN$
 3. $i-bu-kam-ma ina$ IGI $mdAG-DU-DUMU.UŠ$ LÚ.ŠÀ.TAM É.AN.NA
 4. u $mdAG-ŠEŠ-MU$ LÚ.SAG.LUGAL LÚ.EN SIG₅ É.AN.NA
 5. $uš-zi-iz-zi um-ma$ UDU.ME $a-na$ SÁ.DUG₄
 6. [šá] $dGAŠAN$ šá UNUG.KI $li-bu-ka-ma lid-di-in$
 7. [x+] $6 ka-lum$ šá $i-na$ $še-e-nu$ šá $dGAŠAN$ šá UNUG.KI
 8. [ina UG]U $gi-iz-zi ú-ṣu-ú ul-tu$
- lo.e.
9. UD.14.KAM šá ITI.KIN MU.4.KAM $márra-bi$
 10. $ib-ba-kam-ma a-na$ SÁ.DUG₄ šá $dGAŠAN$ šá UNUG.KI
 11. $i-nam-din pu-ut baṭ-lu$ šá UDU.NITÁ.ME SÁ.DUG₄
- rev.
12. $márrab na-ši i-na ú-ṣu-uz-zu$ šá $mdAG-DU-DUMU.UŠ$
 13. LÚ.ŠÀ.TAM É.AN.NA DUMU ' $m̄da-bi-bi$ $mdAG-ŠEŠ-MU$
 14. LÚ.SAG.LUGAL LÚ.EN SIG₅ É.AN.NA LÚ. $mu-kin-nu$
 15. $mdUD-DU-DUMU.UŠ$ DUMU-šú šá $mdDI.KUD-PAP.ME-MU$
 16. [DUMU] $m̄ši-gu-ú-a$ $mdAMAR.UD-MU-DÙ$ DUMU-šú
 17. [šá] $mdAG-ŠEŠ-GÁL-ši$ DUMU $mLÚ-dIDIM$ $mní-din-ti$
 18. LÚ.SAG.LUGAL $m̄IR-dAMAR.UD$ DUB.SAR DUMU-šú
 19. šá $mdAMAR.UD-MU-MU$ DUMU $mdEN-DUMU.UŠ-ŠEŠ$
- u.e.
20. UNUG.KI ITI.KIN UD.13.KAM
 21. MU.4.KAM $m̄kám-bu-zi-iá$ LUGAL TIN.TIR.KI
 22. LUGAL KUR.KUR

Line 7 Note that this text posits a shearing in month VI (Ulūlu = Aug/Sept); most other evidence for shearing has it taking place in early summer, as is expected.

(1-6) (Concerning) Arrabu/Gudādū, the herdsman of sheep and goats, who is under the responsibility of Arad-Bēl/Šarru-kīn, whom Arad-Bēl brought in and stood in front of Nabû-mukīn-apli the chief administrator and Nabû-aha-iddin the royal supervisor of the Eanna, saying: “He should bring in and deliver sheep and goats for the offerings of the Lady of Uruk.”

(7-12) At the shearing, from the fourteenth of month VI (Ulūlu) of the fourth year (of Cambyses), Arrabu will bring in [x+] 6 male lambs that come from the sheep of the Lady of Uruk and give them for offerings to the Lady of Uruk. Arrabu takes responsibility for (any) stoppage (in the offerings) of the sacrificial sheep.

(12-14) (This obligation was formulated) in the presence of Nabû-mukīn-apli//Dābibī the chief administrator of the Eanna and Nabû-aha-iddin the royal supervisor of the Eanna.

(14-18) Witnesses: Šamaš-mukīn-apli/Mandānu-ahhē-iddin//Šigūa, Marduk-šuma-ibni/Nabû-aha-ušabši//Amēl-Ea and Nidinti the courtier.

(18-19) The scribe Arad-Marduk/Marduk-šuma-iddin//Bēl-apla-uşur.

(20-22) Uruk, the thirteenth day of month VI (Ulūlu), fourth year of Cambyses king of Babylon, king of lands.

Might this text be a response to the orders for livestock deliveries discussed above?

That is, might it be that the temple orders a herd supervisor to arrange for the delivery of animals, and he, in turn, and perhaps only at times, officially obligates his underling(s) to carry out this order by presenting them before the uppermost temple authorities in the way described here? The punishment for non-fulfillment of the obligation would then fall not on the herd supervisor, but on those herdsmen selected and presented by him. This interpretation takes into account the herd supervisor’s position between the temple and the herdsmen, and the fact that all the bookkeeping centered around the herdsmen.

As it happens, the main responsibilities that we associate with the herd supervisors are also in part those of another temple position, the *ša muhhi rēhāni*. I will examine this unique position in detail, and then attempt to discern differences between it and the position of the herd supervisors. Although they share almost identical functions in some aspects, there is one crucial difference between them that demonstrates beyond doubt that they stood in different juridical relationships to the temple.

IV. The *ša muhhi rēhāni*

Only one man at one time held the title of *ša muhhi rēhāni* (lit. “one over the balances”). Gimillu/Innin-šuma-ibni held the position from at least the seventeenth year of Nabonidus until the sixth year of Cambyses.¹¹⁰ The textual evidence for Gimillu’s protracted and peculiar career is some of the most remarkable in the cuneiform record. In particular YOS 7 7, a mammoth 148-line text, records a legal proceeding against Gimillu, in which he is accused, in front of twenty-one of Uruk’s elite, of abusing his office and misappropriating the Eanna’s animals. TCL 13 125, TCL 13 134, YOS 7 35, and implicitly YOS 7 31 record single instances of abuse similar to those claimed in YOS 7 7. Explicit evidence for the corruption of an influential person is rare enough in cuneiform texts; evidence that an institution attempted to rectify the situation (as is commonly assumed in this case) is rare.

¹¹⁰ Gimillu (without title) first appears in Nabonidus 9-III-17 (YOS 6 208), speaking to a group of citizens (*mār banī*) about an ox of the Lady of Uruk. See Kümmel, *Familie*, 104.

Taken as a whole, as has been described many times, the texts depict the Eanna impeaching and levying hefty fines upon Gimillu over two decades (539-520 B.C.), while at the same time they also show him continuing in the same function and later entering into large-scale agricultural contracts with the temple. This evidence is colored by a set of undatable letters that appear to be from Gimillu (letters rarely give patronyms) to the temple administrators, in which he makes quaint excuses, demands payments, and defends himself against accusations of fraud.¹¹¹

San Nicolò first advanced the notion that YOS 7 7 and related texts depict Gimillu embezzling the Eanna's animals (he refers to YOS 7 7 as having, "zwölf Tatbestände von Diebstahl, Veruntreuung and eventuell auch Betrug"),¹¹² and, although he mentions Gimillu's status as an oblate (*širku*) of Ištar and his connections to the Achaemenid viceroy in Babylon,¹¹³ he does not effectively correlate the accusations in YOS 7 7 to Gimillu's position as *ša muhhi rēhāni*. Similar problems remain with other accounts of Gimillu. For example, Dandamaev describes Gimillu as, "a clever and brazen swindler who ... occup[ied] a high position in the economic affairs of the Eanna temple,"¹¹⁴ yet he does not relate the fact that Gimillu had a "high position" in the temple to the descriptions of texts that follow. Cocquerillat does not consider Gimillu's position as *ša muhhi rēhāni*

¹¹¹ See Muhammad Dandamaev, *Slavery in Babylonia*, trans. Victoria A. Powell (DeKalb: Northern Illinois Press, 1984), 533-537; Cocquerillat, *Palmeraies*, 102-04; Mariano San Nicolò, "Parerga Babylonica IX (Der Monstrezprozess des Gimillu, eines širku von Eanna)," *ArOr* 5 (1933): 61-77; Joannès, "Textes judiciaires," 212, 225-26; and now Michael Jursa, "Auftragsmord, Veruntreuung und Falschaussagen: Neues von Gimillu," *WZKM* 94 (2004): 109-132.

¹¹² Mariano San Nicolò, "Parerga Babylonica IX," *ArOr* 5 (1933): 71.

¹¹³ Ibid. 72ff.

¹¹⁴ *Slavery*, 102.

in detail. She does, however, discuss Gimillu with regard to rent farming, and we shall expand upon her astute observations below. Olmstead implicitly attaches the accusations against Gimillu to an early Achaemenid policy to root out rampant “graft” in Babylonia that carried over from Nabonidus’ reign. Both he and Cocquerillat argue specifically that Gimillu took advantage of the onset of Persian rule to aggrandize himself:

How the new [*scil.* Persian] regime worked in practice may be illustrated by the case of the archthief Gimillu. Taking advantage of the administrative breakdown, he had appropriated numerous animals belonging to the Lady of Uruk, though her star brand proved them Ishtar’s property. Without the consent of the deputies and scribes of the temple Eanna, he took sheep from the pasture lands of the temple . . . In September of 538, Gimillu was brought to trial before the assembly, council, and officials of Uruk; the list of those present is a *Who’s Who* of that city.¹¹⁵

Olmstead’s subsequent account—although inaccurate and somewhat fanciful—is commendable for attempting to connect the impeachment of Gimillu to the royal administration in Babylon, in that there was an expressed relationship between Gimillu and the Achaemenid viceroy Gobyras.¹¹⁶

The nature and function of Gimillu’s position as *ša muhhi rēhāni* must be surmised, but not without solid foundation. The title is most often translated as something like “the one in charge of the (remainder of) animal assets of the Eanna,” yet this description

¹¹⁵ A. T. Olmstead, *History of the Persian Empire* (Chicago: University of Chicago Press, 1948), 71ff. Pierre Briant’s discussion of Gimillu in his *From Cyrus to Alexander: A History of the Persian Empire* (Winona Lake: Eisenbrauns, 2002), 75 seems to agree that the royal administration was behind the impeachment of Gimillu (p. 74f.: “in many cases Gubaru’s administration served as an appeals tribunal. The most striking example is the case brought by the temple authorities against the oblate Gimillu in September 538 . . . ”).

¹¹⁶ See Matthew Stolper, “‘No-One Has Exact Information Except for You’: Communication between Babylon and Uruk in the First Achaemenid Reigns,” in *A Persian Perspective: Essays in Memory of Heleen Sancisi-Weerdenburg*, Achaemenid History XIII, eds. Wouter Henkelman and Amélie Kuhrt (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 2003), 265ff., and here, pp. 120ff.

obscures the most important aspect of Gimillu's relationship to the Eanna (to be considered shortly), and in fact gives the impression that Gimillu was a regular temple official, which he was not. He is called a temple oblate (*širku*),¹¹⁷ yet how this relates to his function as *ša muhhi rēhāni* is unclear and remains problematic.¹¹⁸ What is more, the title *ša muhhi rēhāni* is thus far only known in apposition to Gimillu's name. It is never prefixed by the determinative for "profession" (LÚ),¹¹⁹ and is known only in association with him. In fact, Gimillu is most often found in association with livestock without explicit mention of the title. The title is not yet found in the Ebabbar archive, and is found once in another text, of unknown provenience.¹²⁰ All of this strongly implies that Gimillu's function as *ša muhhi rēhāni* was irregular and *ad hoc*.

Early in the reign of Darius I Gimillu appears as large-scale agricultural contractor (*ša muhhi sūti*) at the Eanna, and it is this position that, I think, provides the basis from which one can solidly conjecture about the nature of his tasks as *ša muhhi rēhāni*. The General Contractor (*fermier général* or "rent farmer") method of agricultural exploitation

¹¹⁷ See, for example, YOS 7 149:1.

¹¹⁸ Indeed, the matter of *širkus* is in desperate need of reevaluation. Jursa, *Landwirtschaft*, 3 n. 18 argues that the translation "oblate" is too narrow, preferring "temple slave" (or "temple 'slave'" to indicate reservations). The fact that the Eanna fines Gimillu for his infractions—or for that matter confiscates the property of the herdsmen, some of whom were also *širkus*, to pay off balances owed to it—belies the basic definition of slavery (that is, if indeed Gimillu and the herdsmen were both temple slaves as commonly understood, the Eanna would simply be taking its own property back as a fine). Whatever the case may be about Gimillu's *širku* status, he was certainly not a menial laborer, nor, for that matter, is there any indication that he was temple chattel—the current discussion seems proof enough that, if nothing else, Gimillu operated immediately outside of the punitive reach of the temple. If indeed Gimillu were attached to the temple to any degree of the usual understanding of (temple) slavery, his actions would have been dealt with almost certainly in a manner that did not require assemblies, royal and municipal officials, and a weighing of evidence. This is a topic ripe for a volume in itself.

¹¹⁹ The more common *ša muhhi sūti* is written both with and without the LÚ.

¹²⁰ VAS 3 210:5 and 10 mentions a *ša muhhi rēhāni ša bīt mār šarri*, "the one who is over the balances of the house of the prince." Here, as well, the profession is not preceded by LÚ.

is found both at the Eanna temple of Uruk and the Ebabbar temple of Sippar, and has been examined by a number of scholars. Its basic premise is best described by Jursa:

Der Generalpächter . . . ist ein Unternehmer, der zwischen dem Tempel, der ihm sehr grosse Teile, zum Teil auch pauschal ganze Kulturen (Dattelgärten, Obstgärten oder Ackerland), des Tempelbesitzes gegen eine fest Pachtabgabe verpachtet hat, und den eigentlichen Bearbeitern des Landes steht. Der Tempel stellt dem Generalpächter Arbeiter und Arbeitsmittel, d.h. Pflüge und Pflugrinder sowie Werkzeug, zur Verfügung. Die Gärtner oder Bauern sind direkt dem Pächter verantwortlich.¹²¹

Thus, the temple placed large tracts of arable land and/or orchards, workers, and equipment under the control of one man (or group of men) in exchange for a guaranteed fixed income from that land and/or orchard. The ample and varied evidence for the General Contractor system has exposed similar (yet sparsely documented) methods of “income contracting” at both the Eanna and Ebabbar in which the contractor carries a *ša muhhi* title. For example, there is the *ša muhhi ešrî*, “the one over the tithe,”¹²² *ša muhhi bītāti*, “the one over the (rent from) the houses,” and *ša muhhi quppi* (*ša šarri*), “the one who is over the cash-box (of the king).” In fact, it is now generally assumed—although each case calls for particular investigation—that people who carry the title *ša muhhi* with a type of temple income leased from the temple the right to collect that particular income for a fixed amount of money or payment in kind.¹²³

I therefore assume that Gimillu’s position as *ša muhhi rēhāni* was established under the same economic principles as the other *ša muhhi* positions, yet somehow customized

¹²¹ Jursa, *Landwirtschaft*, 85.

¹²² See Michael Jursa, *Der Tempelzehnt in Babylonien*, AOAT 254 (Münster: Ugarit Verlag, 1998), 19-36.

¹²³ See Bongenaar, *Prosopography*, 9f., and 428ff.

for livestock management. That is, one would assume that Gimillu leased the right to collect a certain number of sheep and amount of wool (perhaps per month) from the external management, and in return was allowed to keep for profit any animals extracted from them above that number. Before using this hypothetical description of Gimillu's position to elucidate the evidence, let us first use that evidence to view aspects of his position in practice.

The most evident of Gimillu's tasks was to organize and register the total amount of the herdsmen's outstanding balances. The heading of YOS 7 46:1 reads *rēhānu ša lāti* (ÁB.GUD.HI.A) MU.5.KAM *Kuraš šar Bābili šar mātāti sanquma ana Gimillu/Innin-šuma-ibni nadnu*, “the balances of cattle were checked in the fifth year of Cyrus, king of Babylon, king of lands, and were given to Gimillu/Innin-šuma-ibni.” This allows us to restore the final lines of YOS 7 39 (64ff.) as *naphar rēhu ša sēni SÍK.HI.A u SÍK.ÙZ* *ša MU.[4.KAM Kuraš]* *šar Bābili šar mātāti ša ina pan [nāqidī ša qāt Ibni-Ištar]* UD.18.KAM *ša Abu [rēh(ān)u ša sēni SÍK.HI.A u SÍK.ÙZ]* *sanquma [ana Gimillu/Innin-šuma-ibni nadnu]*, “the total balances (text sing.) of sheep and goats, wool, and goat hair for the [fourth] year of [Cyrus] king of Babylon, king of lands, which are at the disposal of the [herdsmen under the control of Ibni-Ištar], [the balance(s) of sheep and goats, wool, and goat hair] were checked and [were given to Gimillu/Innin-šuma-ibni] on the eighteenth day of month V (Abu).” San Nicolò assumes that the temple administration gave Gimillu the tablet listing the balances itself, the *tuppu ša rēhāni* mentioned in YOS 7 198 (see below).¹²⁴

¹²⁴ San Nicolò, “Viehwirtschaft IV,” 365f, and see now Michael Jursa, “Auftragsmord, Veruntreuung und Falschaussagen: Neues von Gimillu,” *WZKM* 94 (2004): 121ff., esp. p. 125.

His second task was to collect animals from the herdsmen. This is implicit in the fact that the recurring complaint against Gimillu is that he took animals from the external management but did not give them to the Eanna (see, for example, YOS 7 7:1ff, here, pp. 119f.). In other words, Gimillu had to answer for the withholding of animals from the Eanna; this, in turn, could only have been considered unlawful if Gimillu was legally empowered to extract animals from the external management in the first place (otherwise the offense would have been in the simple act of taking the animals, not in the failure to transfer them to the Eanna). YOS 7 198, a rather odd and very difficult text, also may make reference to this aspect of his responsibility (lines 9-16):

Sîn-šarra-usur ša rēš šarri bēl piqitti Eanna Gimillu māršu ša Innin-šuma-ibni ša ina muhhi rēhāni ša sēni u lāti makkūr Ištar Uruk ana šakānu tēme ana muhhi tuppi ša rēhāni [ša] sēni lāti u iṣṣūrī ša ultu Eanna nadna-[DA]-šú ana šapāri ana sēri ibukamma umma alikma rēhi ša ... nadna-DA-ka esiramma ana Eanna šūribi¹²⁵

Sîn-šarra-usur the royal supervisor of the Eanna brought [before an assembly] Gimillu/Innin-šuma-ibni, who is in charge of the balances in sheep and goats and cattle, the property of Ishtar of Uruk, in order to make a statement about the record of balances of sheep, goats, cattle and poultry, which were *given to him* from(?) the Eanna to put to pasture (lit. send to the countryside), (Sîn-šarra-usur) saying, “go and collect and bring to the Eanna the balance of . . . that was *issued to you.*”

The language of this passage is difficult, and its context is especially strange in view of lines 16ff., which state that *Gimillu ina puḥur qīpāni u mār bānī ultu bīt karē ilsumma* ‘ultu’ bāb bīt karē šabta, “Gimillu, in the assembly of residents and citizens, ran away from the granary, but was caught [at] the gate of the granary.” It appears at first that Gimillu is being interrogated for mismanaging the record of the Eanna’s animals stored

¹²⁵ The ellipsis here reads *na as ḥur pak ku*, which is unclear to me. San Nicolò (“Viehwirtschaft IV,” 367f.) suggests, “*na-as-ḥur pak-ku na-ad-na-ak!-ka* (um den (dich) zu kümmern dir Weisung gegeben wurde).” The phrase should parallel the previous (and unclear) phrase *rēhāni [ša] sēni lāti u iṣṣūrī ša ultu Eanna nadna-[DA]-šú*, but it still resists conclusive interpretation.

on the hoof with its herdsmen. The system of livestock contracting (i.e., the external management) over which Gimillu had responsibility is described here as those animals “given to him to be put to pasture.” He is told to collect the balance—*rēhu*, which cannot refer to the total amount of animals stored on the hoof, but instead must refer to those animals to be extracted from the external management for sacrifices—and bring it to the Eanna. It is unclear what occasioned this inquiry, as there is no evident mention of wrongdoing in the text, nor does anything in the text link with other types of accusations against Gimillu for the misappropriation of the animals. Although the context and meaning of this text are not yet apparent, it links the Gimillu to the collection of balances.

Thirdly, Gimillu took responsibility for investigating and bringing to the temple management those who were involved with the misappropriation of temple animals. For example, YOS 7 7:117ff. begins (and then is followed by an accusation against Gimillu):

*Šamaš-aha-iddin apilšu ša Nabû-šuma-ukīn nāqidu ša Bēlti ša Uruk ša 10
šanātu itti šēnišu ana Eanna la īrubu ša qīpānu u ṭupšarrū ša Eanna Gimillu
ana muḥhi Šamaš-aha-iddin išpuruma Gimillu Šamaš-aha-iddin īmuruma ana
Eanna la ībuku*

(Regarding) Šamaš-aha-iddin/Nabû-šuma-ukīn, the herdsman of the Lady of Uruk, who for ten years did not enter the Eanna with his sheep and goats; the residents and scribes of the Eanna sent Gimillu out after Šamaš-aha-iddin, and Gimillu found Šamaš-aha-iddin but did not bring (him) to the Eanna.¹²⁶

Further evidence for this aspect of Gimillu’s responsibilities is found in YOS 7 111, in which he and Ardija/Nanā-uṣalli guarantee to the chief administrator and royal supervisor of the Eanna (lines 3ff. *pūt ... ina qāt PN₁ šatammu u PN₂ ša rēš šarri bēl piqitti Eanna*

¹²⁶ The Babylonian here is actually rendered as three subordinate clauses. For clarity I have translated it as a complete phrase.

našū) that they will deliver to them a group of men who were accused of (or were accessories to) the illegal slaughter of some of the Eanna's animals. This aspect of his position may be related to Harold Stigers, "Neo- and Late Babylonian Business Documents," *JCS* 28 (1976): no. 2, which is a list of four *nāqidū ša qāt Ibnâ is qāt parzilli ana Gimillu/Innin-šuma-ibni nadnu*, "herdsmen under the control of Ibnâ, were given in manacles to Gimillu/Innin-šuma-ibni."

Thus, Gimillu was more a collections agent than a husbandry entrepreneur. That is to say, agricultural contractors undertook the development of unexploited land, had responsibility for temple workers and equipment, and benefited from a successful harvest. Gimillu, in contrast, was superimposed over the usual system for the management and collection of animals, in that both he and the herd supervisors (*rab būlis*) carried out orders from the uppermost temple authorities to arrange for the delivery of animals from the herdsmen. Although the circumstances differ somewhat, both dealt with the same animals at the same time, and they expedited the exact same transaction (external to internal) in both cases.

We should reevaluate the case against Gimillu both in terms of my new interpretation of the nature and function of *rēhu* and in terms of the recent reassessment of the various *ša muhhi* positions. To begin, previous scholarship levies two accusations against Gimillu, which some argue are interrelated: first, that Gimillu was a corrupt official; and second, that he was a prodigious thief. We shall consider the latter first.

The total number of animals for which Gimillu had to make restitution in YOS 7 7 is 3 cows (one of which was not branded with the star of the Lady of Uruk), 4 male sheep and/or goats (UDU.NITÁ), 2 ewes, 2 female lambs, 1 male lamb, and 1 goat. He took the animals over a two-year period,¹²⁷ and of the 10 sheep and goats, 6 were surplus—i.e., male (I assume here that UDU.NITÁ does not refer to female animals, as females are usually labeled as such in these texts). In addition to these, Gimillu is accused of taking another ewe in TCL 13 134 (Cyrus 25-VIII-04), two cows in TCL 13 125 (Cyrus 08-VIII-01), two sheep and/or goats (UDU.NITÁ) in YOS 7 31 (Cyrus 20-IX-04), and perhaps one goat in YOS 7 35 (27-XI-03).¹²⁸ Thus, over a five-year period, we know that Gimillu is accused of taking 5 cows and 13 sheep and goats, of which 8 were surplus.

We gain perspective on these numbers in a variety of ways. For example, we know that in Gimillu's time the Eanna booked as assets *at least* twenty thousand animals stored on the hoof with its herdsmen,¹²⁹ over which Gimillu had jurisdiction. Obviously, the number of animals that he is accused of taking is a negligible proportion of that total. From another perspective, the Eanna sacrificed a minimum of nine lambs every day, and some festival days (of which there were many) called for the sacrifice of fifty or more. The number of sheep (of which we are aware) that Gimillu "stole" over a five-year period is equal to just over the minimum number sacrificed on an average day (although the theft of cattle is another matter). And for a third perspective, texts contemporaneous

¹²⁷ The text mentions year 17 of Nabonidus and the first year of Cyrus. The date of the composition of the text is not known.

¹²⁸ Two different Gimillus are mentioned in the text, and it is not clear which Gimillu is mentioned in lines 8-14 about the theft of a goat, although it is likely not Gimillu/Innin-šuma-ibni.

¹²⁹ See here, Chapter Three, pp. 55f.

with Gimillu record the theft of numerous animals by persons other than him, some of which also mention the use of violence. Some of these texts are:

- YOS 6 77, an interrogation over the theft of six sheep (four branded with a star), forty-six hides, and five mina of wool.
- YOS 6 123, which mentions the theft of five sheep and goats.
- YOS 6 137, an interrogation over the theft of three ewes and one male lamb.
- YOS 6 144, which mentions the theft of six oxen.
- YOS 7 128, which mentions the illegal slaughter of a ewe, with the threat of violence.
- YOS 7 141, which mentions the theft of an unknown number of animals from the first to the third year of Cambyses.
- YOS 7 161, which mentions the theft of ten sheep, five of which were unmarked.
- YOS 7 189, which mentions the theft of an unknown number of animals, with the threat of violence.
- Dillard NB Lewis Coll.: FLP 1584, a dispute over the theft of ten sheep and goats.
- Spar, *Studies*: no. 2, which mentions the theft of two ewes.

There is no reason to think that Gimillu's supposed misappropriation of the Eanna's animals placed excessive stress on its system of animal management and utilization, or, for that matter, reduced the temple's animal reserves by any noteworthy amount.

Moreover, the number of animals taken by Gimillu is not outside the range of thefts of

animals that the Eanna dealt with on a regular basis. In other words, Gimillu's supposed larceny was neither grand nor extraordinary.

But was Gimillu corrupt, officially or otherwise? Even though his assumed larceny was less than prodigious, does it nevertheless suggest that he abused his function in the temple? The first lines of YOS 7 7 suggest an affirmative answer to these questions (lines 1ff.): *alpū šēnu u mimmū makkūr Bēlti ša Uruk u Nanā ša Gimillu apilšu ša Innin-šuma-ibni ina qāt rab būlī [ù] rē'ūti ša Bēlti ša Uruk iššūma(!) ana Eanna la iddin*, “oxen, sheep and goats, and other property of the Lady of Uruk and Nanā which Gimillu/Innin-šuma-ibni took from the herd supervisors [and] the shepherds of the Lady of Uruk but did not give to the Eanna.” Yet in context Gimillu’s appropriating of animals from the external management was not a crime against the herdsman (as is often assumed), as the animals were taken against a balance, explicitly stated in lines 43 and 98, or are described as being the “fold” (*qabuttu*) of a herdsman, which is an explicit reference to the Eanna’s animals under the care of another. Instead, it was crime against the corporate Eanna, in that Gimillu took animals that belonged to it, but were stored on the hoof with its external management. In legal terms, it was no different from stealing the animals from the Eanna’s holding pens. That being said, the problem with YOS 7 7 and related texts is that it is this type of exploit, extracting animals from the external management and keeping them, that should be implicit in his function as *ša muhhi rēhāni*. That is, if Gimillu’s *ša muhhi* position paralleled in function other *ša muhhi* types of income contracting, he was then empowered to extract animals from the external management *that belonged to the Eanna* and utilize them for personal profit. Indeed, not only does contemporary evidence show him officially in charge of inventorying and

collecting animals from the external management, he was actually put in charge of arresting recalcitrant herdsmen. Although YOS 7 7 may represent abuse of the *ša muhhi* system as such, this is not evident in explicit terms of the text.

In view of Gimillu's *ša muhhi rēhāni* function and what we know about the Eanna's livestock holdings at this time, it is difficult to discern why the temple impeached him for the (ostensible) misappropriation of thirteen, mostly male, temple animals. Moreover, as has been stated many times, it seems incomprehensible that Gimillu continued to accumulate fines for the assumed misappropriation of animals, but remained in the same function both for years on end and through a change in regimes. It is simply not satisfactory to attribute this to his audacity, brazenness, corruption, or independently minded criminality. As I have shown, Gimillu's functions as *ša muhhi rēhāni* and his status gave him access to the Eanna's animals. His supposed misappropriation of them was not large in scale, and was neither unusual compared to the many other instances of animal theft at the Eanna, nor (with the available evidence) known to be frequent.

These facts prompt us to speculate some on the temple's motives behind case against Gimillu. As I see it, we can set aside the issue of whether Gimillu was corrupt—although he certainly may have been so—and, instead, pursue a line of inquiry that views the evidence from another perspective. Namely, how do we square Gimillu's *ša muhhi rēhāni* position with the allegations against him? In other words, knowing that Gimillu's position superimposed him over the Eanna's regular system of animal management, it seems legitimate to ask why the Eanna doggedly treated him like a regular cattle rustler when allegations of misappropriation arose.

This inconsistency becomes even more evident when viewed in light of the fact that, Gimillu's problematic *širku* status notwithstanding, he functioned as a temple outsider. The Eanna imposed upon Gimillu the standard thirtyfold penalty for the misappropriation or theft of temple animals. Gimillu's tasks as *ša muhhi rēhāni* exactly paralleled those of the herd supervisors, yet the thirtyfold penalty is never to the best of my knowledge threatened or inflicted on members of the external management.¹³⁰ When the Eanna confiscated the property of the herdsmen in lieu of a balance in animals, it did not do so at the rate of thirty-for-one, nor in the published record is the thirtyfold penalty ever threatened in texts obligating the herdsmen to deliver animals to the Eanna. In fact, the threat of the punishment of the king, which differs from the thirtyfold penalty,¹³¹ was the standard penalty threatened against members of the external management for

¹³⁰ In fact, the only text of which I am aware in which *any* member of the temple personnel must pay a thirtyfold penalty in animals is the unusual YOS 7 192. The text implies that Šamaš-mudammiq/Ina-tēšī-ētir, who is otherwise known as a temple scribe, took Bēl-lūmur/Bēl-ušallim's ass, a message from Nabūgu (certainly the son of Gobyras, see Muhammad Dandamayev, *Iranians in Achaemenid Babylonia*, Columbia Lectures on Iranian Studies, ed. Ehsan Yarshater, 6 [Costa Mesa, New York: Mazda Publishers, Bibliotheca Persica, 1992], 103f.) in his possession, and Nabūgu's bowcase. The text states that when witnesses confirm that he did take the items, he will pay thirty asses for the one to the Lady of Uruk, and will bear the punishment of the king. It appears that the former punishment is for stealing an ass, and the latter is for taking the message and quiver. In TCL 12 77 a Nabū-nāṣir is obliged by the thirtyfold penalty to bring in his shepherd. Kümmel, *Familie*, 68 suggests that he may be a herdsman, but this is never explicitly stated. Interestingly, the thirtyfold penalty is not threatened in YOS 7 189, in a situation where it should be. A shepherd of the Lady of Uruk claims that two slaves (*lamutānus*) of Kīnā/Rahīmu beat him and took the Eanna's sheep. Kīnā is given a time by which he must bring in his slaves before the royal judges. If he does not bring them in, then (lines 15ff.), *miṣṭi ša sēni ša Ištar ša Uruk ša ina pan Baba-ēreš rē ŋ Kīnā ana Ištar Uruk iṭṭir*, "Kīnā will pay for the deficit of sheep of Ištar of Uruk that were under the control of the shepherd Baba-ēreš." It is exactly this type of situation where the thirtyfold penalty is most often threatened. Is it possible that Kīnā's slave-owning status (to the best of my knowledge he is not known elsewhere), however it may have been achieved, protected him from the standard penalty? A similarly unusual situation may also found in Michael Jursa, "Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery," *Iraq* 59 (1997): nr. 11 (pp. 106f.).

¹³¹ See note 130 on YOS 7 192, where the two punishments are mentioned together; see also Mariano San Nicolò, "Parerga Babylonica VIII (Der §8 des Gesetzbuches Hammurapis in den neubabylonischen Urkunden)," *ArOr* 4 (1932): 336 n. 1. It may also be the case that these cases were also ultimately subject to royal authority—see YOS 7 31, where a Marduk-dīna-ēpuš is to go to Babylon to argue a case in the "royal court house" (*bīt dīni ša šarri*) against (*itti*) the uppermost temple authorities over two of the Eanna's sheep taken from him by Gimillu. As there is no indication that he was a temple herdsman, his penalty for non-appearance is thirtyfold (see San Nicolò, *ibid.* 338f.).

mismanagement or misappropriation of the temple's animals. In other words, the Eanna's sacrificial sheep and goats were subject to two levels of jurisdiction: the threat of the punishment of the king is used to deter the misappropriation or mismanagement of the Eanna's animals by its own personnel, whereas the theft or misappropriation of this property by people not affiliated with the temple, including Gimillu, brought about a thirtyfold penalty.¹³²

As San Nicolò noted, the thirtyfold penalty has deep-seated roots in Babylonian law,¹³³ as §8 of the Code of Hammurabi stipulates a thirtyfold penalty for the theft of temple (or royal) animals. The parallel is interesting, but I think his discussion is incomplete. Laws §§261-267 of the Code consider cases that deal with misconduct between a man (*awīlum*) and his herdsman (*nāqidum*, also called *rē'ûm*, “shepherd”). If the herdsman causes unintentional decreases to the herd, then, for example, he is to compensate the owner one-for-one (§263), or is to compensate him by the terms of his contract (§264 *ana pī riksātišu*). If the herdsman deliberately causes the loss of animals (§265 *šumma rē'ûm . . . usarrirma šimtam uttakkir u ana kaspim ittadin*, “if a shepherd acts criminally and alters the brand [of the cattle or sheep and goats] and sells them”) he is to replace tenfold what he stole (*adi 10-šu ša išriqu . . . ana bēlišunu iriab*). In other words, there is a legal distinction between the outright theft of animals (§8) and misconduct (both unintentional and deliberate) between contracting parties in animal husbandry (§261-267). True, the Code of Hammurabi does not contemplate temple or royal institutional contract animal husbandry. That notwithstanding, our current

¹³² See as well here, Chapter Three, p. 103 note 107, where pre-Nabonidus punishments are discussed.

¹³³ “Parerga Babylonica VIII,” 327-328

discussion on the Neo-Babylonian/Achaemenid Eanna mirrors the distinction between these two sets of laws. There is a thirtyfold penalty for the outright theft of temple animals by outsiders, whereas deliberate misconduct on the part of the herdsman in a husbandry contract is subject to a different system of recompense. Considering that the corporate Eanna is the other party to the husbandry contract, I would draw a distinction between the Eanna's own personnel as a whole and temple outsiders (parallel, perhaps, to the distinction between an *awīlum*'s household, including slaves and contractors, and everybody else). This distinction may be too clear-cut; it is entirely possible that the different personnel relationships with the temple brought about different legal relationships as well.

Gimillu would not have been subject to the punishment of the king. In fact he may have actually meted out the punishment (whatever that may have meant in reality), as he was well connected to the royal administration in Babylon. YOS 7 70 refers to a group of temple slaves whom Gimillu and the Persian viceroy Gobyras's roving agent (*musah̪hiru bēl piqitti ša Gūbaru*) brought to Uruk after an inspection by Gobyras. The temple slaves were turned over to the chief administrator and royal supervisor of the Eanna, who then ask Gimillu *mīnū Gūbaru tēme ana muhhišunu iškunka*, “what instructions did Gobyras give you about them (i.e., the temple slaves),” to which Gimillu replied *mimma tēme Gūbaru ana muhhišunu ul iškunanna*, “Gobyras did not give me any instructions about them.” He informs the temple authorities to let them work at the Eanna *adi muhhi tēme ša Gūbaru ana muhhišunu tašemmā*, “until you hear instructions from Gobyras about them.”¹³⁴ Gimillu then guarantees against the disappearance of those workers whom he

¹³⁴ From Stolper, “‘No-One Has Exact Information,’” 265ff.

freed from chains. The text ascribes immense importance to Gimillu, both as a middleman between the Eanna and Babylon, and also in terms of his control over newly appointed (or restored) temple personnel. The importance of Gimillu's connection to Babylon should not be underestimated. It is Gimillu, in fact, and *not* the royal supervisor of the Eanna, who stands between the Eanna and Babylon in this text.

Gimillu's outsider status (although he may have been drawn from the local population) and his connections to the uppermost levels of the provincial government at Babylon make it almost certain that his function as *ša muhhi reḥāni* was initiated and supported by the royal administration. His position was established very late in the reign of Nabonidus and continued (and perhaps expanded) under the Persian conquerors. If Gimillu was given a royal mandate to organize and register the Eanna's animals kept on the hoof with its herdsmen, to extract animals from the herdsmen in a way that perhaps allowed him to take some animals as profit, and to hunt down and use force against delinquent herdsmen and cattle thieves, it is quite possible that this overarching power brought about the indignation and resentment of the resident temple authorities. It is also possible that he was viewed as a collaborator with the Persian occupiers. In fact, I believe the vilification of Gimillu in texts such as YOS 7 7 resulted from an attempt to rein in a heavy-handed, Babylon-supported bureaucrat. If Gimillu was a royal agent and was thought to be compiling fiscal information about the Eanna for the crown, and/or if his royal connections insulated him from the usual ways by which the Eanna controlled its authorities (demotions, loss of prebends, social pressure, etc.), then it is possible that the resident temple authorities kept him in check by treating him as a common cattle thief when specific allegations of misappropriation arose. History is replete with examples of

local animosity toward, and ensuing abuse of, imperial agents, even (or especially) when they are drawn from the local population. This is, of course, speculative, but, to my mind, less so than trying to understand the case against Gimillu in terms of his psychology, or contemplating his motives without context.

Perhaps the most interesting thing about Gimillu is that his appointment as *ša muhhi rēhāni* appears to have produced positive results. Given that the vast majority of what we call the Eanna archive does not come from a controlled excavation and is therefore incomplete and disjointed, it is nevertheless striking that evidence for the Eanna's use of *rēhu* to control animal inventory appears and flourishes contemporaneously with Gimillu. Although hundreds of texts associated with livestock management from the Eanna date to the pre-Nabonidus Neo-Babylonian period, very few make reference to balances.¹³⁵ This stands in direct contrast to Eanna texts from the reigns of Nabonidus and the early Achaemenids, in which *rēhu* is the focus of livestock inventory, both functionally, in that a herdsmen's balance is his main connection to the Eanna, and administratively, in that the Eanna organized and kept track of its herdsmen by their balances. It is possible, indeed likely, that the system of share-breeding existed in some form in the earlier Neo-Babylonian period (through the reign of Nebuchadnezzar), but manifests itself and expands under the reigns of Nabonidus and the early Achaemenid rulers. This may be due to the fact the vast majority of pre-Nabonidus texts are administrative, in which one would not expect to find mentions of external balances (but, in fact, *rēhu* occurs frequently in internal memoranda from the later-period Eanna, often marking the transfer

¹³⁵ The only texts of which I am aware are: AnOr 8 15:5f., BIN 1 176 (see here, Chapter Three, pp. 71ff.), GCCI 1 113:3f., NBC 4897 (see here, pp. 44ff.), McEwan LB Tablets 39:14, TCL 12 54:19, and UCP 9/1, 56:5.

of animals *ina rēhi ša PN*, “against the balance of PN”). Although we may uncover more evidence for some share-breeding at the pre-Nabonidus Eanna, the near-absence of *rēhu* or the phrase *ina rēhi* in the copious textual record of the earlier period, especially when contrasted with centrality and ubiquity of these terms in the later period, strongly suggests that the Eanna’s livestock bookkeeping was restructured during the reign of Nabonidus. Given Gimillu’s position, his connections, his responsibilities, and the time during which he operated, it seems more prudent to assume that Gimillu was directly related to this realignment of the Eanna’s books than to assume it happened independent of his supervision.

CHAPTER FOUR

THE INTERNAL LIVESTOCK MANAGEMENT OF THE EANNA OF URUK

I. Introduction

This chapter analyzes in detail the internal livestock management of the Eanna temple of Uruk in Neo-Babylonian and early Achaemenid times. The analysis is primarily concerned with the internal management's organization and administration, as the evidence consists of hundreds of administrative notes and receipts that document the various steps in the temple's utilization of its sheep and goats. The care and propagation of the animals were the primary responsibilities of the external livestock management, as is detailed in Chapter Three. The internal livestock management received animals from the external and took responsibility for the preparation and use of the animals in temple ritual. Although the two spheres of management worked symbiotically, each had a distinct and separate legal, economic, and administrative relationship with the Eanna.¹ The internal management divides into two branches: the offering shepherd (*rē’i sattukki*) and the *bīt urî*. The former is the name of a distinct profession within the temple

¹ See the discussion about van Driel's division of livestock management into these two spheres here, Chapter One, pp. 7ff.

dedicated to preparing the animals for sacrifice. The latter is a term for a place within the temple precinct where stock houses and stock feeders operated.²

This chapter begins with a detailed analysis of the office of the offering shepherd, as it is much better documented than the *bīt urî* is.³ First (II) I study the orthography of the title, the social position and prosopography of the offering shepherd, and the tasks of the office. Next (II.A.1) I provide a detailed analysis of the animal intake of the offering shepherd, centered on the audit text YOS 7.8. The next section (II.A.2) is dedicated to a study of the nature of the textual evidence for the intake of the offering shepherd from the external management. Sections II.A.3 and II.A.4 discuss the offering shepherd's intake from sources other than the external management. Then, following a brief study of the composition of the *bīt urî* (III), I analyze the independent evidence for its intake (III.A). This section is short, as there is very little evidence for the *bīt urî* that does not occur in tandem with evidence for the offering shepherd. In the next section (IV.A-C) I analyze the evidence for the animal outlays of the offering shepherd and *bīt urî*, although, again, most of the evidence centers around either the offering shepherd alone or the offering shepherd and the *bīt urî* together. The final section (V) is a summary and conclusion.

² There is no Eanna parallel of which I am aware for the phenomenon of entrusting sacrificial animals to various “houses” of royal, governmental, or other elite persons connected to the temple, which is found in the early Ebabbar material (see da Riva, *Der Ebabbar-Tempel von Sippar in frühneubabylonischer Zeit*, AOAT 291 [Münster: Ugarit Verlag, 2002], 294ff.).

³ Much the same seems to be true of the early Ebabbar material. Da Riva presumes that internal management of the Ebabbar was controlled by the offering shepherd (see *Ebabbar*, 271), suggesting that animals only passed through the *bīt urî* on their way to him (see p. 271 and the diagram on p. 301). Although in her discussion of “Die Mästen und die Lieferungen *ana ut̄tati*” she states (*Ebabbar*, 272), “[a]us manchen Texten des Ebabbar ergibt sich, daß die Opfertiere in einigen Fällen von den externen Herden in die Maststallungen (*bīt urē*) geliefert wurden,” she does not then give examples where these animals are transferred to the offering shepherd, nor can I verify this in the published material. If true—and there are many indications that the Ebabbar’s animal management system of this time was quite different from the Neo-Babylonian/Achaemenid Eanna’s—it is the opposite of what is known from the Eanna, where the offering shepherd sends animals to the *bīt urî* (see here, Chapter Four, p. 185).

II. The Offering Shepherd

“Offering shepherd” is a literal rendering of the Babylonian *rē’i sattukki*. The word *sattukku* refers to the daily, regular offerings presented to the gods of Babylonian temples.⁴ One often finds *sattukku* mentioned alongside other types of offerings that occur less frequently, such as weekly or monthly, or offerings for festival days. The title is most often written LÚ.SIPA SÁ.DUG₄. In a few instances it is replaced by LÚ.SIPA *ginê*, written syllabically.⁵ The word *sattukku* is thought to be interchangeable with the word *ginû* in this title and others, and in the name of the offering itself, with no difference in meaning. In keeping with the literature, I use the English “offering shepherd” and normalize the Babylonian as *rē’i sattukki*, although it is possible, following Kümmel, that *rē’i ginê* is correct, at least at Uruk.⁶

⁴ The best description of the *sattukku* offering ritual is still A. Leo Oppenheim, *Ancient Mesopotamia: Portrait of a Dead Civilization*, 2nd Edition (Chicago: University of Chicago Press, 1977), 183ff. See also Ellen Robbins, “Tabular Sacrifice Records and the Cultic Calendar of Uruk,” *JCS* 48 (1996): 61ff. and da Riva, *Ebabbar*, 267ff. for a discussion of the ritual as it appears in economic and administrative texts.

⁵ E.g., YOS 6 77:26 (*gi-ni-e*); Gehlken, *Uruk* I no. 13:19 [= rev. 7'] (*gi-ni-e*); YOS 17 345:10 (*gi-ni-e*).

⁶ On this well-known interchangeability see most recently A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997), 143, where older literature is cited. He concludes, presumably speaking only of the Ebabbar (*ibid.*), “[i]n the early Neo-Babylonian period the texts favour the word *ginû*, while texts from a later date favour *sattukku*.” Certainly at some point *sattukku* and *ginû* were two different types of offerings, as they appear syllabically side-by-side in some royal inscriptions (see CAD G s.v. *ginû*.), but Hans Kümmel (*Familie, Beruf und Amt im spätbabylonischen Uruk*, Abhandlungen der Deutschen Orient-Gesellschaft, 20 [Berlin: Mann, 1979], 84 n.1) makes the plausible suggestion that the Babylonian rendering of the logogram SÁ.DUG₄ is *ginû* in texts from Uruk-Eanna of this period. Indeed, one finds the writing SÁ.DUG₄ and *gi-né-e* in the same texts (YOS 7 127:7 and 9f., YOS 6 32:53 and 54), and one finds the title written both ways in functionally similar contexts. The two syllabic renderings never appear together in published administrative or legal texts. Moreover, to the best of my knowledge, the logographic rendering of *ginû*, GI.NA, never appears in the writing of the offering shepherd’s title at the Eanna. Certainly there was free variation between *sattukku* and *ginû* in the family name and profession “oil presser of the regular offerings” at the Ebabbar (see Bongenaar, *Prosopography*, 476), yet the evidence for the Eanna is not nearly as extensive (see Kümmel, *Familie*, 153). The question of the proper normalization of the title must remain open.

Some texts mention a known offering shepherd without the title, but in a context or with functionally similar parallels that make it clear he was acting in an official capacity. At times the office is mentioned without a personal name. The office seems to have been hereditary.⁷

The majority of texts that mention the offering shepherd are administrative notes and receipts recording the transfer of livestock either into or out of his (or his associates') possession. Two important texts are "balanced accounts" for specific time periods. One (YOS 7 8) records both intake and outlays of animals, whereas the other (YOS 7 74) records mostly outlays.⁸ The general sheep and goat audit YOS 7 143 (see here, pp. 147ff.) also mentions the offering shepherd. The bureau of the offering shepherd⁹ (with the *bit urī*) also appears regularly in a series of texts called "tabular sacrifice records" as a place from which sacrificial sheep and goats are taken. One also finds the offering shepherd and his personnel in ration lists. The offering shepherd rarely appears in letters and is found in legal texts only as a witness.¹⁰

The writing LÚ.SIPA SÁ.DUG₄, or any of its variants, lends itself to the literal translation of "offering shepherd" or the like in modern languages. He was called a

⁷ See Kümmel, *Familie*, 84ff.

⁸ A fragmentary balanced account of the offering shepherd, GCCI 2 371, dates to the very early Neo-Babylonian period (Nabopolassar 30-XIIb-12).

⁹ I refer here to the bureau of the offering shepherd because tabular sacrifice records never name the offering shepherd; they only refer to the office as such. At other times I use the expression to refer to the offering shepherd and his staff as one unit.

¹⁰ E.g., letter = BIN 1 78:10 (unclear); as a witness = YOS 6 77:26, YOS 6 200:14, YOS 7 9:10, AnOr 8 41:7 (one of nine people called LÚ.DUMU.DÙ.MEŠ), AnOr 8 52:19, TCL 13 134:12f. See Muhammad Dandamaev, "The Composition of the Citizens in First Millennium Babylonia," *AoF* 24 (1997): 142f., although he incorrectly identifies the offering shepherd as an "overseer of the herds."

“shepherd” apparently because he was in charge of the maintenance and ritual slaughter of the sacrificial animals, not because he was a shepherd in the usual understanding of the profession. He did not watch over or care for working flocks of sheep and goats, nor was he itinerant. The majority of animals under his care were males, and all of them were sacrificed or disposed of in other ways.

The “offering shepherd” is to be distinguished from the “shepherds of the sacrificial sheep,” but the evidence suggests that there was a functional relationship between the two occupations. The shepherds of the sacrificial sheep appear in four texts listing rations given out to various temple personnel.¹¹ Each text has an entry for rations given to LÚ.SIPA.ME (or MEŠ) šá UDU.(NITÁ) SÁ.DUG₄ / *gi-né-e*, “shepherds of the sacrificial sheep,” and a few things indicate that this rendering is not a fuller form of LÚ.SIPA SÁ.DUG₄. First, the entries refer to shepherds (plural), whereas the title “offering shepherd” is always found in the singular, even when texts refer to two or more of them.¹² Second, one text mentions a single shepherd of the sacrificial sheep (YOS 17 73:4, see here, p. 193) by name in a unique context. The date of the text is during the tenure of a well-known offering shepherd (LÚ.SIPA SÁ.DUG₄), which suggests a distinction between the two occupations.¹³ Third, in YOS 6 32, in an entry for rations, Šūzubu the offering shepherd appears in the line immediately following the shepherd of the sacrificial sheep (lines 53 and 54), and YOS 6 229:13 reads 7 GUR 3 (PI) 4 BÁN 3 SILÀ šá LÚ.SIPA.MEŠ šá UDU.NITÁ SÁ.DUG₄ *mšu-zu-bu*—that is, the name Šūzubu immediately follows the rations

¹¹ AnOr 9 9:21, YOS 6 229:13, YOS 6 32:53, and BIN 2 133:21.

¹² For example, YOS 19 157:1-2 names three offering shepherds, but the title is singular.

¹³ The text dates to NbK 11-IV-23, when Tukulti-Marduk/Kudurru was the offering shepherd (see Kümmel, *Familie*, 86).

entry for the shepherds of sacrificial sheep. This text dates to a time when Šūzubu/Kudurru was the offering shepherd, which strongly suggests that the text is expressing some relationship between the two. It seems reasonable to infer that the shepherds of the sacrificial sheep were subordinates and staff members of the offering shepherd.¹⁴

That the offering shepherd had a staff is made clear in GCCI 1 311:1-5, a note for 10 shekels of silver *ana șiditišu ana Šūzubu aplišu ša Kudurru u șabī ša ittišu ana pan rab nikkassi ana muhhi immer sattukki* (UDU.NITÁ SÁ.DUG₄) šaprū “(silver) for his travel provisions, (issued) to Šūzubu/Kudurru and the men who were sent with him to the ‘chief of accounts,’ on account of the sacrificial sheep.” Šūzubu/Kudurru is a well-known offering shepherd. YOS 19 229:2f. also names this same Šūzubu, along with the “wages of shepherds of the offering shepherd” (*ina idī ša rē’ūti ša [rē’i] sattukki*). In addition, YOS 7 74:28 (here, pp. 189ff.) mentions a *rē’i bābi*, “shepherd of the gate” alongside a known offering shepherd. This person might also belong to the offering shepherd’s staff. As I discuss below, the shepherds of the sacrificial sheep and other members of the offering shepherd’s staff were responsible for the day-to-day handling and the delivery of the animals to the temple for sacrifice.¹⁵

In Table 4.1 I update Kümmel’s prosopography of the offering shepherd for the tenure of five offering shepherds.¹⁶

¹⁴ See Kümmel, *Familie*, 84 and 85 note 20.

¹⁵ See here, pp. 194f.

¹⁶ *Familie*, 84ff.

Table 4.1: Updated prosopography of the Offering Shepherds at the Eanna

	Kümmel earliest	New date	Kümmel latest	New date
Balātu/ Nabû-ušallim	Cam xx-IV-V-03 YOS 7 143 ^a	Cam 28-xx-02 ^b Sack Cuneiform Documents 64	—	—
Kiribtu/ Bēl-ibni^c	Nbk 13-X-21 UCP 9/1, 36	Nbk 15-IV-21 YOS 17 72	Nbk 02-XI-21 UCP 9/1, 38	Nbk 23-IV-22 YOS 17 94
Kudurru/ Šumā	Nbk 21-VII-02 GCCI 1 121	Nbk 04-XII-01 YOS 17 102	Nbk 10-IV-05? GCCI 1 11	Nbk 14-V-07 Gehlken, <i>Uruk I</i> no. 33
Nabû-ušallim/ Kudurru	Nbk 29-IX-22 BIN 1 148	Nbk 20-VIII-22 Durand Catalogue EPHE 442	—	—
Tukulti-Marduk/ Kudurru	Nbk 07-IX-21 UCP 9/1, 33	Nbk 28-IV-02 Moore Michigan Coll. 20	Nbk 20-V-36 GCCI 1 144	Nbn 21-XI-07 YOS 19 157 ^d

Note: Each entry includes the text in which the date is found; a dash (—) indicates there is no new information.

^a Kümmel, *Familie*, 85 actually lists TCL 13 233 first, querying the ruler's name (Kyr?) and the year (8?). The reason for Kümmel's suggestion is unclear to me.

^b In Michael Jursa, "Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery," *Iraq* 59 (1997): no.2 (pp. 100f.), which dates to Cam 05-X-01, he restores [^m]*Balātu* *māršu ša Nabû-ušallim apil rē i* [*sattukki*] in lines 8f. However, this is uncertain (though likely).

^c Kiribtu/Bēl-ibni appears with another offering shepherd, Tukulti-Marduk/Kudurru, in every text, see Kümmel *Familie* 85.

^d Mentioned along with the other offering shepherds Šūzubu and Nabû-ušallim.

There is an extreme difference between Kümmel's beginning date and the new one for Tukulti-Marduk, but Moore's copy is clear and unambiguous. Additionally, Tukulti-Marduk appears in another text in Nebuchadnezzar year 12, which itself would have been

a remarkable revision of Kümmel.¹⁷ These revisions reveal that from the second to the seventh year of Nebuchadnezzar II at least two offering shepherds operated (Kudurru and Tukulti-Marduk), in addition to years 21-23 of Nebuchadnezzar's reign, in which we know of at least four offering shepherds (Tukulti-Marduk, Kiribtu, Nabû-ušallim and Bēl-iqīša).¹⁸

We do not know with any certainty what constituted the responsibilities of the offering shepherd. The documentation details with some precision his control of animal intake and outlays, but says nothing about why the animals passed through his supervision. The offering shepherd's presence in this system was certainly required; texts make a clear and deliberate distinction between animals either given to or taken from the offering shepherd and those given to or taken from the *bīt urî*. This ever-present distinction intimates that the offering shepherd did not simply preside over an animal holding facility. E. Robbins plausibly suggests that the offering shepherd and the *bīt urî* employed different methods of preparing animals for sacrifice, and that these different methods are referenced in ritual texts.¹⁹ The ritual texts classify sacrificial animals by their feeding regimen: barley-fed (*ŠE.BAR KU*), milk-fed (*kabri ša GA*) or not barley-fed (*ŠE.BAR la KU*). Indeed, one finds a tripartite division of animals in some administrative texts, in which some animals are given to the *bīt urî*, others to the offering shepherd, and others sent directly for offerings.²⁰ This division may reflect the three methods of

¹⁷ YOS 17 345 (Nbk 03-XII-12). Compare also YOS 17 84 (Nbk 08-IV(?)13) and YOS 17 360 (Nbk xx-xx-14).

¹⁸ See Kümmel, *Familie*, 84.

¹⁹ Robbins, "Cultic Calendar," 65f.

²⁰ See for example GCCI 1 252, discussed here, pp. 151f.

preparation, the third being those not needing any special preparation, and thus the “not-barley-fed” sheep. The *bīt urī* most likely took charge of the barley-fed livestock, given the name of the sub-office *mušākil immerī* (sheep feeder) and the few references to feed in association with it.²¹ With this conjecture, then, the offering shepherd by default would have had responsibility for milk-fed sheep. This must remain merely a proposal until new evidence comes to light.

There is little to glean about the offering shepherd’s system of managing livestock. All of the information is incidental. For example, there is a curious distinction at the end of the offering shepherd’s account settlement (YOS 7.8) between those sheep under his responsibility that were inspected for impending offerings (lines 24f., 56 UDU.NITÁ.MEŠ *ana sattukki ša ultu UD.1.KAM ša Simānu MU.1.KAM Kuraš šar mātāti ina panišu amrā*) and those that remained under his responsibility (line 28, [r]ēhi 220 UDU.NITÁ.MEŠ *ina pan Šū[zubu]*). This seems to indicate that the offering shepherd retained his animals in two groups.²² It is likely that he had one group at hand in the temple precinct for the sacrifices of the current month, while he kept the other group of animals, which he would use for the next month(s), outside the city. Some texts associated with the offering shepherd confirm that he kept some animals in the field,²³ and few also mention the death of an animal *ina tāmirti* (EDIN), “in the pasture.”²⁴

²¹ E.g., see the letter TCL 9.144:17ff, and here, p. 176.

²² Discussed here, pp. 141f.

²³ See here, pp. 201f.

²⁴ See here, pp. 201ff.

It is important to note that the offering shepherd did not keep large numbers of sheep and goats on hand at any given time. For example, the audit YOS 7 8 states that he had 440 animals under his responsibility at the time of his last audit, and 220 at the end of the current one. Moreover, YOS 7 74, an audit of the offering shepherd's animal outlays, states that he had 128 animals under this responsibility at the end of that audit. Given what we know about the number of animals used per month,²⁵ these numbers indicate that the offering shepherd kept a one to three-month supply of animals on hand at any given time. Festival months would have called for the collection of hundreds of extra animals.

II.A.1. The Intake of the Offering Shepherd

The majority of texts dealing with the offering shepherd are short administrative receipts, the syntax and grammar of which are often difficult to grasp. Patterns among these texts do emerge, and often one can only understand these patterns in light of exceptional texts. YOS 7 8 is one such exceptional text. It is called a “settlement of accounts” (*epēš nikkassi*), and is a balanced account of the intake and outlays of the sheep and goats under the responsibility of the offering shepherd Šūzubu/Kudurru for the three-year period 04-[II]-[15] Nabonidus to 24-II-01 Cyrus. As it is quite important for the ensuing discussion, I present here a full edition of the text, which differs in important ways from San Nicolò's.²⁶

²⁵ See here, pp. 195f.

²⁶ Published in Mariano San Nicolò, “Materialien zur Viehwirtschaft in den neubabylonischen Tempeln III,” *Or. NS* 20 (1951): 140ff.

YOS 7 8
Uruk (Eanna)

30-II-01
Cyrus

obv.

1. [e-peš NÍG].ŠID šá UDU.NITÁ SÁ.DUG₄ šá ul-tu UD].4.KAM [šá ITI.GU₄ MU.15.
KAM]
2. ^dAG-IM.TUK LUGAL TIN.TIR.KI a-di UD.24.KAM šá ITI.GU₄ MU.1.KAM [mku-ra-áš]
[LUGAL KUR.KUR]
3. a-na mšu-zu-bu A-šú šá mNÍG.DU na-ad-nu-ma NÍG.ŠID it-ti-šú ép-<šú>
ITI.GU₄ UD.30.KAM MU.1.KAM mku-ra-áš LUGAL KUR.KUR

5. 440 UDU.NITÁ.ME šá UD.22.KAM šá ITI.[GU₄] šá MU.15(!).KAM ^dAG-IM.TUK
LUGAL TIN.TIR.KI
6. i-na e-peš NÍG.ŠID i-na pa-ni-šú i-re-hi
7. 4856 UDU.BAR.GAL 19 MÁŠ.GAL i-na ŠU^{II} LÚ.NA.GADA.ME
8. 1473 UDU.NITÁ.ME ina UDU.NITÁ SÁ.DUG₄ šá É ri-du-tu
9. ù UDU.NITÁ SIZKUR.ME LUGAL šá mšu-zu-bu ul-tu É gi-iz-zi i-bu-ku
10. 261 UDU.NITÁ ir-bi
11. 6 UDU.NITÁ.ME ina šul-lu₄-un-du ina muḥ-hi LÚ.DUB.SAR.MEŠ
12. PAP 7036 UDU.NITÁ.MEŠ ù 19 MÁŠ.GAL
13. ina lib-bi 5800 UDU.NITÁ.ME ri-ḥi-it SÁ.DUG₄ u gu-uq-qu-ú šá ul-tu
14. UD.23.KAM šá ITI.GU₄ MU.15.KAM a-di qí-it šá ITI.GU₄ MU.1.KAM mku-raš LUGAL
KUR.KUR par-su
15. 96 UDU.NITÁ.ME šá MU.15.KAM MU.16.KAM u MU.17.KAM a-na ^dIGI.DU
lo.e.
16. ù ^dGAŠAN É.AN.NA a-na UBARA.KI šap-ru
17. 20 UDU.NITÁ.ME ina ITI.ŠE šá MU.15.KAM 11 ina ITI.ŠE šá MU.16.KAM
18. PAP 31 UDU.NITÁ.ME a-na baṭ-lu a-na É.BABBAR.RA [šap-ru]
rev.
19. 61 UDU.NITÁ.ME 17 MÁŠ.GAL a-na ḥi-it-bu ina É GU₄.MEŠ u UDU.NITÁ.ME
20. 140 UDU.NITÁ.ME a-na ú-ru-ú 24 UDU.NITÁ.ME ina KÁ.ME nu-uk-ku-su
21. 274 par-rat a-na qa-bi-e na-ad-na 2 MÁŠ.GAL a-na GIŠ.BANŠUR
šá LÚ.ú-ra-šú šá UD.UNUG.KI
22. PAP 6426 UDU.NITÁ.MEŠ 19 MÁŠ.GAL ma-ḥi-ir
24. 56 UDU.NITÁ.MEŠ a-na SÁ.DUG₄ šá ul-tu UD.1.KAM šá ITI.SIG₄ MU.1.[KAM]
25. mku-ra-áš LUGAL KUR.KUR ina pa-ni-šú am-ra
26. 334 pag-ra-nu ma-ḥi-ir
27. PAP.PAP 6816 UDU.NITÁ.MEŠ 19 MÁŠ.GAL [ma-ḥi-ir]
[ri]-e-ḥi 220 UDU.NITÁ.MEŠ ina pa-ni mšu-[zu-bu]

Line 1 San Nicolò restores MU.16.KAM in the break, presumably influenced by the clear MU.16.KAM in line 5. I, however, have restored MU.15.KAM, and taken line 5 to be a scribal (or copyist's) error. The fact that year fifteen is mentioned alone in line 14, in lines 15 (along with years sixteen and seventeen) and 17 (with year sixteen) precludes the possibility that the audit would begin its reckoning in year sixteen. Moreover, lines 5f. state that the offering shepherd had a remainder of 440 sheep after the previous account settlement, which is dated to Nabonidus 22-II-15(!), and the

audit begins its count of sheep set aside for *sattukku* offerings on Nabonidus 23-II-15, which would naturally be the day after the previous account settlement (with my emendation).

Line 2 Reconstruction of royal titles follows San Nicolò. There does not appear to be enough space to fit the full titles of LUGAL KUR.KUR LUGAL TIN.TIR.KI

Line 3 It is possible that -šū is written in the break, some distance from the *ép-* sign.

Line 11 I am at a loss to explain this line 11. It is unparalleled, and it will not be discussed further except to note that its inclusion in this text seems to indicate that this audit is comprehensive.

(1-4) The balanced account (lit: “settlement of accounts”) of sacrificial sheep and goats, which were given to Šūzubu/Kudurru from the fourth day of [month II (Ajaru), fifteenth year] of Nabonidus, king of Babylon, until the twenty-fourth day of month II (Ajaru), first year of Cyrus, [king of lands], and (for which) an accounting was done with him. The thirtieth day of month II (Ajaru), first year of Cyrus, king of lands.

(5-6) 440 sheep remained under his responsibility on the twenty-second day of month II (Ajaru), fifteenth(!) year of Nabonidus, king of Babylon, following the (previous) balancing of accounts.

(7) 4856 young male sheep and 19 goats from the herdsmen.

(8-9) 1473 sheep from the sacrificial sheep of the *bīt ridūti* and the sheep of the royal offerings which Šūzubu took from the shearing shed.

(10) 261 sheep (received as) *irbu*.

(11) 6 sheep from the *repayment* incumbent upon the scribes.

(12) A total of 7036 sheep and 19 goats.

(13-14) From which, 5800 sheep and goats, the remainder of *sattukku* and *guqqû* offerings, which were set aside from the twenty-third day of month II, fifteenth year (of Nabonidus) until the end of month II, first year of Cyrus, king of lands.

(15-16) 96 sheep which were sent to Udannu in the fifteenth, sixteenth, and seventeenth years for Nergal and the Lady of Uruk.

(17-18) 20 sheep in month XII (Addaru) of the fifteenth year, 11 in month XII of the sixteenth year, a total of 31, were sent to the Ebabbar on account of a stoppage.

(19) 61 sheep and 17 goats (given) for *hitbu* in the cattle and sheep stables.

(20) 140 sheep (transferred) to the (*bīt*) *urî*.

(20) 24 sheep were slaughtered at the gates.

(21) 274 young female sheep were given to the “fold.”

(21-22) 2 goats for the table of(?) the *urāšu* worker(s?) of Larsa.

(23) A total of 6426 sheep and 19 goats were received (from him).

(24-25) 56 sheep for *sattukku* offerings for the first day of month III (Simānu) the first year of Cyrus, king of lands, were inspected as under his responsibility.

(26) 334 carcasses were received (from him).

(27) A grand total of 6816 sheep and 19 goats were received (from him).

(28) A remainder of 220 sheep is under the responsibility of Šūzubu.

YOS 7 8 follows the standard “balanced account” schema,²⁷ in that it begins with a set of animals for which the offering shepherd is held (at least administratively) responsible (debits, which I am calling “intake” [lines 5-12]); this includes a number of animals carried over from a previous audit (lines 5-6). This section is then followed by (line 13) *ina libbi*, “from which,” and another set of animals for which the offering shepherd is credited (credits, which I am calling “outlays” [lines 13-27]). The difference between these two sections is called the *rēhu*, “remainder.”

The relationship between the offering shepherd and the animals counted as intake is never clarified in any way.²⁸ For example, the total of animals is not described as “received” or “under his responsibility” or the like (although see here, pp. 143f). The language of the outlay section is clear through line 22. The animals are set aside (*parsu*, line 14), sent out (*šapru*, lines 16 and 18), slaughtered (*nukkusu*, line 20), and given (*nadna*, line 21).²⁹ However, the summary of these outlays is described in line 23 as *mahir* (written *ma-hi-ir*), a third-person masculine singular stative without explicit subject, which stands in contradistinction to the preceding third-person *plural* statives. The text then describes animals under the responsibility of the offering shepherd for

²⁷ See Michael Jursa, “Accounting in Neo-Babylonian Institutional Archives: Structure, Usage, and Implications,” in *Creating Economic Order: Record-keeping, Standardization, and Development of Accounting in the Ancient Near East*, eds. Michael Hudson and Cornelia Wunsch (Bethesda: CDL Press, 2002), 157.

²⁸ Line 9 states that the offering shepherd took animals from the shearing shed, but this describes only how the offering shepherd obtained the animals, not how they were booked once they were in his possession.

²⁹ Line 21 refers explicitly to female sheep.

upcoming offerings as “inspected” (*amra*), but then describes 334 carcasses as *mahir*.

The grand total of all these is also described as *mahir*.

The meaning of *mahir* in this text is not immediately evident. In fact, the meaning of the stative of *mahāru* in Eanna texts in general has long been inferred, with little corroborating research.³⁰ Michael Jursa convincingly argues that in Eanna texts the phrase x PN *mahir* can *only* mean “x has been received from PN.”³¹ This agrees with the logical flow of “balanced account” type texts like YOS 7 8, in that the person being audited must account for what is given to (i.e., debited against) and taken from (i.e., credited to) him. In effect, the animals are credited to the offering shepherd’s account when they are counted as received from him. Although, interestingly, this does not as a rule involve the actual transfer of animals, as the fifty-six sheep reported in lines 24-25 are labeled *ina panišu amra* “inspected as under his responsibility” for a series of

³⁰ In a brief note to YOS 7 8 San Nicolò (“Viehwirtschaft III,” 144) implies that “the Eanna” is the subject of *mahir*, and by extension, that *mahir* is active (“the Eanna received”). The use of *mahir* in the stative for an active state is common enough in Akkadian, but I know of no administrative or legal text in which the Eanna appears as the subject of a verb, much less in that function as a corporate entity, or in a way that would affect the morphology of a verb. Some legal texts do mention the Eanna as a location to which deliveries are to be made, often in texts similar to those that specify other locations, such as the *bīt urī*, in the same context, or that specify a person, such as the Eanna’s chief administrator (the *šatammu*), to whom a delivery is to be made. However, I am unaware of texts that mark the Eanna proper as actively receiving intake. In addition to this, administrative texts from the Eanna archive usually document transfers between different people or departments *within* the Eanna—and, in a very basic sense, these people and departments *are* the Eanna. To assume that administrative texts treat the Eanna as a corporate entity is both unsupported by evidence and, in fact, contrary to the purpose of the texts themselves.

³¹ Michael Jursa, *Neo-Babylonian Legal and Administrative Documents: Typology, Contents, and Archives*, Guides to the Mesopotamian Textual Record, 1 (Münster: Ugarit-Verlag, 2005), pp. 46ff. Aware that he is postulating an atypical nuance for this stative, Jursa and his colleague K. Kleber test the meaning of x PN *mahir* from a variety of angles—not only grammatical and situational, but also statistical (e.g., how often is x PN *mahir* used as compared to other possible ways to mark the receipt of things), and comparative (e.g., comparing and contrasting texts that mark the receipt of items in both the Eanna and the Ebabbar archives). He produces overwhelming evidence in support of his argument. Also, Michael Streck, review of *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv*, I, by Erlend Gehlken, ZA 83 (1993): 270 posits this understanding of *mahir*, as does Erlend Gehlken himself in, “*mahāru* in spB Wirtschaftstexten,” NABU 2004/74.

offerings that began the day after the period of the audit.³² It then appears that the temple also credited the offering shepherd for those animals that were selected for impending offerings.

Thus, animals are credited to the offering shepherd's account—that is, they are counted as received from him—when they are physically expended in offerings (lines 13-23), when they die of natural causes (line 26), and when they are selected for impending offerings (lines 24-25). This lattermost set of animals, which are described as *ina panišu* “under his responsibility,” must be differentiated from those that are booked as “remaining” (in two sets, lines 6 and 28), even though they use the same administrative terminology (*ina panišu*). In fact, the two sets of “remaining” animals are identical in function, in that those that “remain” in YOS 7 8 will be counted as a debit (or “intake”) in the offering shepherd’s next audit (as were those from a preceding audit, lines 5f.).

Yet does the remainder in this audit refer to animals that do not actually exist? That is, audits that follow the “balanced account” schema attempt to validate and justify one independently calculated set of figures in terms of another, and to that end the difference between the two may result in a number that does not correspond to something that actually exists. This number is then booked as either a debit or a credit and carried over to the next audit.³³ Thus, it is possible that the entry for 440 “remaining” animals that begins the debit section of YOS 7 8 (lines 5f.) somehow consists (in part or wholly) of

³² The period of the audit ended on 30-II-01 (which was in fact the date of the audit itself) and the offerings began 01-III-01.

³³ See Jursa, “Accounting,” 157 esp. note 137.

prior, carried-over debits that no longer correspond to actually existing animals (if they ever did). To the best of my comprehension, this is how Gehlken understands *rēḥu*.³⁴

This is unlikely for three reasons. First, the offering shepherd is not a sheep breeder. In fact, he deals almost exclusively in male animals, so any possible discrepancy between the estimation of herd increase and actual increase is not applicable here. Secondly, sheep and goats, being either alive or dead, are easily countable and locatable, in contrast to, say, a crop of barley, which may settle or leak during transport, be incorrectly measured or estimated, and so on. In other words, YOS 7 8 does not employ a variable, so nothing in the debit or credit sections of this text leads one to assume that the numbers refer to anything but actually existing animals (either alive or dead), so I can see no basis for the remainder to be anything but the same. Third, the fact that the audit begins with a carried-over debit of 440 animals and ends with one of 220 proves that at least half of the original debit corresponded to actually existing animals. This is supported by YOS 7 74 (see here, pp. 189ff.), another “balanced account” of the offering shepherd (although it only enumerates the credits), which concludes with the following lines:

- 29. *ri-e-hi* 128 UDU.ME *ina SÁ.DUG₄ šá ul-tu UD.1.KAM šá ITI.SIG₄*
- 30. MU.8.KAM *ina pa-ni-šú-nu ITI.SIG₄ UD.7.KAM MU.8.KAM*
- 31. *mku-ra-áš LUGAL TIN.TIR.KI LUGAL KUR.KUR*

(29-30) A remainder of 128 sheep, for offerings beginning with the first of month III (Simanu), year eight is under their (*scil.* Šamaš-aha-iddin and the offering shepherd’s) responsibility.

(30-31) The seventh day of month III (Simanu), eighth year of Cyrus, king of Babylon, king of lands.

³⁴ Erlend Gehlken, *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv*, I: *Texte verschiedener Inhalts*, Ausgrabungen in Uruk-Warka Endberichte, Band 5 (Mainz am Rhein: von Zabern, 1990), 20f. and 21 note 19.

In other words, part of the animals that constitute the remainder in this text were already put to use for sacrifices that had taken place for six days prior to the actual auditing (i.e., six days into the next audit period). Thus this remainder cannot represent an intangible number. The evidence is unequivocally in favor of the offering shepherd's remainder being in actually existing animals.

One finds two administrative steps in YOS 7 8, and these are both complemented by short administrative texts and notes. In the first step, the animals remaining after the previous audit (line 5f.) and those that remain at the end of the current audit (line 28) are described as “under his (i.e., the offering shepherd’s) responsibility” (*ina panišu*). We assume, then, that the total intake was under his responsibility intermittently during the period covered by the audit.³⁵ The correlation to this in administrative texts is well documented, and discussed here, pp. 153ff. These texts take the form: x animals (*ša*) PN₁ *mahir ina pan* PN₂ *rē’i sattukki*, “x animals (that) have been received from PN₁ (are) under the responsibility of PN₂ the offering shepherd.” These texts show animals being received, most often from members of the external management, and put under the responsibility of the offering shepherd. The second step, in which live animals are received from the offering shepherd, is not well documented. The known texts are studied here, pp. 192ff. At times the animals under the responsibility of the offering shepherd died; these are counted as credits in YOS 7 8:26. The transfer of carcasses from the offering shepherd, which is well documented by administrative texts, is studied here, pp. 199ff. Transfers of both live and dead animals from the offering shepherd take the

³⁵ Cf. YOS 7 143:3 (here, pp. 147f.), which describes the animals given to the offering shepherd only as “under his responsibility.”

same form: x (*pagr[ān]u ša*) UDU.NITĀ (*ša ina panišu*) PN *rē²i sattukki mahir*, “x (carcass[es] of) animals (which are under his responsibility) have been received from the offering shepherd.”

A final set of texts records animals and carcasses that were set aside (and sent and given) for sacrificial offerings from the offering shepherd (*lapani rē²i sattukki ana sattukki u guqqî parsu*). These texts, which are referred to as tabular sacrifice records, are discussed here, pp. 191ff. They essentially record the second step from another perspective, and apparently, seeing that they are without totals or summary information, the Eanna used them for something other than marking the offering shepherd’s outlays.

YOS 7 8 makes clear that the offering shepherd had two distinct sets of animals under his control at any given time. These two sets of animals differ in terms of when they were to be used in ritual. The first set was made up of those animals that had been selected for impending offerings, and the second set were all the other animals under his responsibility from which the first set was to be selected. This administrative differentiation strongly suggests that these two sets of animals were kept physically separate. In effect, the offering shepherd had a general pool of animals under his responsibility, and another set at hand for impending offerings.

In YOS 7 8 just under three-fourths of the sheep and all the goats given to the offering shepherd derived from the herdsmen, that is, from the external management. Moreover, YOS 7 143, discussed below, shows that the vast majority of animals taken from the external management were given to the internal management. Thus the key to

understanding the bulk of the Eanna's animal transfers and transactions is in the relationship between the internal and external managements.³⁶ Of the two branches of the internal management, there is much more textual evidence for the offering shepherd than there is for the *bīt urî*. In fact, as stated above, much of the evidence for the latter occurs in tandem with the former. Although the next section (II.A.2) concerns itself mostly with the offering shepherd, it is presumed, and there is some evidence to substantiate this presumption, that the nature of the textual evidence for at least some sections of the *bīt urî* matches that of the offering shepherd.

II.A.2. The Form, Function, and Nature of the Textual Evidence

The distribution of the external management's livestock to the branches of the internal management is noted in particular, and consistent, ways in many administrative receipts from the Eanna archive. Understanding this process is essential, but the elliptical nature of these texts impedes this understanding. If one examines these texts one at a time and without context, it is often impossible to discern the object of a preposition or distinguish between the subject and object of a verb. By taking them as a group, however, it is possible to detect certain patterns and consistencies. From these, we can begin both to understand the grammar of individual administrative texts, and to reconstruct the allocation process as a whole. In order to understand an administrative text (or group of texts) fully, at times we must borrow back and forth between strict

³⁶ There is no mention in YOS 7 8 of sheep or goats that the temple purchased for offerings, which is the subject of at least two texts from the Eanna archive (Ronald Sack, "Some Miscellaneous Neo-Babylonian Documents," *JCS* 24 (1971/2): UNC 17 [p. 106] and YOS 17 84), and see here, Chapter Two, p. 17f. note 12.

philological analysis and knowledge of what we can infer from the text as it reflects a particular situation in the livestock management system.

A particularly important text is YOS 7 143, which is exceptional in many respects. Unlike many administrative texts, YOS 7 143 is on the whole understandable and clear. The obverse of this tablet lists animal income taken in (or otherwise disposed of) by the temple from the external management over a two-month period (lines 13 to 24!). The reverse describes the allocation of that income to various places and functions within the temple. Unlike most balanced accounts, there is no indication that this text functioned to audit a particular office or person within the Eanna. Instead, it is an impersonal balanced account of the intake and allocation of sheep and goats over a short period.

The obverse and reverse of this text are interchanged in the published copy. The first line in the published version reads [*ina*] ŠÀ, “therefrom,” which should refer to the income from the other side of the text, in addition to which texts of this sort always list debits (i.e., intake) first, then credits (outlays). In the following edition I number lines as in the published copy, but the transliteration and translation follow the correct order.

YOS 7 143
Uruk (Eanna)

xx-V-03
Cambyses

obv.(!)

13. 328 *ka-lum* 1 MÁŠ.GAL 2 MÁŠ.TUR 1 U₈.SAL.MAH_x
14. PAP 332 UDU.ME šá LÚ.NA.GADA.ME šá ŠU^{II} ^{md}IR-^dEN A ^mLUGAL-DU
15. 3 UDU.BAR.GAL 291 *ka-lum* 1 MÁŠ.GAL 2 MÁŠ.TUR 1 U₈.SAL.MAH_x 2 ÜZ.SAL.MAH_x
16. PAP 300 UDU.ME šá LÚ.NA.GADA.ME šá ŠU^{II} ^mNUMUN-*ia* A ^{md}*na-na-a-KAM*
17. 1 UDU.BAR.GAL 101 *ka-lum* PAP 102 šá ^{md}*in-nin-MU-ŠEŠ* A ^mDÙ-*a*
18. ^mDIN A ^m*ri-mut* ù ^{md}*a-nu-DÙ-ŠEŠ* A ^mšu-*la-a*
19. 31 UDU.BAR.GAL 24 *ka-lum* 4 U₈.SAL.MAH_x PAP 59 šá *še-e-nu-u*
20. šá URU.*tag-ri-i-te-nu* šá ^{md}AG-*na-sir* A ^mla-*qí-pi*
21. ^mMU-MU ù ^{md}EN-KAM(!) A.ME šá ^mNUMUN-*ia*
22. PAP-*ma* 793 UDU.ME šá *ina ITI.ŠU* ù *ITI.NE MU.3.KAM*
23. ^m*ka-am-bu-zि-ia* LUGAL [TIN.TIR].KI LUGAL KUR.KUR *ina UGU gi-iz-zi*

lo.e.(!)

24. *ina ŠU^{II} LÚ.NA.GADA.ME sab-tu-nu*

rev.(!)

1. [*ina*] šÀ 35 UDU.BAR.GAL 645 *ka-lum* 2 U₈ 2 MÁŠ.GAL [4 MÁŠ.TUR]
2. PAP 688 *a-na ú-ru-ú*
3. 95 *ka-lum a-na* SÁ.DUG₄ *ina* IGI ^mDIN LÚ.SIPA SÁ.DUG₄
4. 1 *ka-lum i-na ka-lum*.ME šá *ina KÁ.ME nu-uk-ku-su*
5. 1 U₈.SAL.MAH_x *a-na* 1 GÍN KÙ.BABBAR *ina* ŠUK.ME šá LÚ.ERÍN.ME šá *ka-a-du* ^{md}*a-nu-[DU-DUMU.UŠ]*
6. 1 U₈.SAL.MAH_x *a-na* 2 (PI) 2 (BÁN) *i-na* ŠUK-šú ^mlu-ut-tu-ú šá É ŠU^{II}
7. 2 *ka-lum ba-ab-ti* 20 UDU.SILA₄.ME *a-na pa-ra-su*(!) šá ITI.SIG₄ UD.20.KAM *šul-lu*(!)-*mu*
8. 2 U₈.SAL.MAH_x *i-na* ŠUK.ME šá LÚ.ERÍN.ME šá BÀD TIN.TIR.KI
9. *a-na* 1 GUR 1 (PI) 4 (BÁN) ^{md}*in-nin-PAP.ME-MU* LÚ.RIG₇,ME
10. 1 ÜZ.SAL.MAH_x *a-na* 3 (PI) 2 (BÁN) *ina maš-šar-ti-šú* ^{md}AG-DUMU.UŠ-MU A ^{md}EN-DIN-*it*
11. 2 MÁŠ.GAL *a-na* KUŠ.LÁ šá *na-pa-ḥu* ^mba-zu-zu LÚ.SIMUG ZABAR(!)
12. PAP-*ma* 793

Line 10 On *maššartu*, see A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997), 142ff.

(13-14) 328 male lambs, 1 he-goat, 2 young male goats, and 1 barren ewe: a total of 332 sheep and goats from the herdsmen under the control of Arad-Bēl/Šarru-kīn.

(15-16) 3 young male sheep, 291 male lambs, 1 he-goat, 2 young male goats, 1 barren ewe, 1 barren she-goat; a total of 300 sheep and goats from the herdsmen under the control of Zērija/Nanā-ēreš.

(17-18) 1 young male sheep, 101 male lambs; a total of 102 from Innin-šuma-uşur/Ibnâ, Balâtu/Rēmūtu and Anu-bāni-ahi/Šulaja.

(19-21) 31 young male sheep, 24 male lambs, 4 barren ewes; a total of 59 from the sheep and goats of the city of Tagritenu, from Nabû-nâšir/Lâqîpu and Šuma-iddin and Bêl-ēreš sons of Zêrija.

(22-24) A grand total of 793 sheep and goats which were taken from the herdsmen at the shearing in months IV and V (Du'uzu and Abu), the third year of Cambyses, king of Babylon, king of lands.

(1-2) From which, 35 young male sheep, 645 male lambs, 2 ewes, 2 he-goats, [4 young male goats], a total of 688 to the *bît urî*.

(3) 95 male lambs for *sattukku* offerings, (placed) under the responsibility of Balâtu the offering shepherd.

(4) 1 male lamb from the male lambs slaughtered at the gates.

(5-6) 1 barren ewe (issued as the equivalent of) one shekel of silver for the rations of the men of the outposts (under?) Anu-mukîn-apli. One barren ewe (issued as the equivalent of) 84 *qa*, for his rations, Luttû of the storehouse.

(7) A 2 male lamb *installment* of the 20 lambs delivered for the allotment of the twentieth day of month III (Simanu).

(8-9) 2 barren ewes, for the rations of the men of the fortification of Babylon, (issued as the equivalent of) 240 *qa*, (given to) Innin-ahhê-iddin, the chief of oblates.

(10) One barren she-goat (issued as the equivalent of) 120 *qa*, the *maššartu* payment of Nabû-apla-iddin/Bêl-uballit.

(11) 2 he-goats for straps of the bellows, to Bazuzu the bronze smith.

(12) A total of 793.

First, one can infer from this text that the bulk of the Eanna's sheep and goats were under the control of the external management. The use of animals for the non-religious purposes mentioned in lines 5-6, 8-9, and 10-11³⁷ would seem to preclude the notion that the Eanna had another set of animals for secular use (for example, to produce hides, dairy products, or rations). Second, this text makes it clear that the vast majority of sheep and goats were allocated to the internal management. Of the 793 animals collected from (or expended by) the herdsmen, 783 went to either the offering shepherd or *bît urî*. These observations have important implications for understanding how the temple procured and

³⁷ The meaning of line 7 is unclear.

used non-renewable animal products (i.e., hides and meat). They suggest that the main source of these products was animals slaughtered in ritual sacrifice.

One finds the basic pattern of YOS 7 143—animals taken in and allocated to various places within the temple—occasionally as an addendum to a common type of text associated with livestock management, which is called a “Standardurkunde” by Gehlken and an “on the spot herd inspection” by van Driel.³⁸ I refer to them as a “livestock inventory texts” and discuss their utilization in detail here, Chapter Two, pp. 23ff. A basic livestock inventory text is YOS 7 48.

YOS 7 48
Uruk (Eanna)

13-V-05
Cyrus

obv.

1. 14 UDU.*pu-hal*
 2. 164 U₈.ME
 3. 31 *ka-lum*
 4. 60 *par-rat*
 5. PAP 269 BABBAR-*tum*
 6. 5 MÁŠ.GAL
 7. 35 ḫÙZ¹.ME
 8. 8 MÁŠ.TUR
 9. 10 SAL.ÁŠ.GÀR
 10. PAP 58 GE₆-*tum*
- rev.
11. PAP-*ma* 327
 12. *se-e-nu*
 13. *ina* IGI ^{md}INNIN-DIN-SU-E
 14. A ^{md}INNIN-NUMUN-DÙ
 15. ITI.NE UD.13.KAM
 16. MU.5.KAM ^mkur-áš
 17. LUGAL E.KI LUGAL KUR.KUR

³⁸ See Gehlken, *Uruk* I, 21ff., Govert Van Driel, “Neo-Babylonian Sheep and Goats,” *Bulletin on Sumerian Agriculture* 7 (1993): 220f., and see here, Chapter Two, pp. 23ff.

(1-5) 14 rams, 164 ewes, 31 male lambs, 60 female lambs, a total of 269 “whites.”

(6-10) 5 he-goats, 35 she-goats, 8 young male goats, 10 young female goats, a total of 58 “blacks.”

(11-14) A grand total of 327 sheep and goats, under the responsibility of Innin-balāssu-iqbi/Innin-zēra-ibni.

(15-17) The thirteenth day of month V (Abu), fifth year of Cyrus, king of Babylon, king of lands.

There are many texts like this, and although van Driel labels them “on the spot herd inspections,” they almost certainly did not serve to mark the size of a herd following an inspection.³⁹ In Chapter Two (here, pp. 23ff.) I argue that these texts are the administrative counterparts to herding contracts, and that they mark the size of a herd at the herd’s legal inception or after the renegotiation of a herding contract for an already existing herd. That they were used by the Eanna’s internal livestock management is shown by the fact that at times a series of notes will follow the “inspection” section of these texts; we can gain a better understanding of how animals were allocated to the internal livestock management from these notes. The best preserved and most detailed of these (including some exceptional details) is GCCI 1 252.

³⁹ See my discussion of these texts here, Chapter Two, pp. 23ff.

GCCI 1 252
Uruk (Eanna)

13-III-41(?)
Nebuchadnezzar II

obv.

1. 267 UDU.*pu-hal*
2. 1630 U₈.ME
3. 250 *ka-lum*
4. 420 *par-rat*(!)
5. PAP 2567 BABBAR-*ti*
6. 16 MÁŠ.GAL
7. 21 ÚZ.ME
8. 7 MÁŠ.TUR
9. 6 MUNUS.ÁŠ.GÀR
10. PAP 50 GE₆-*ti*
11. PAP-*ma* 2617 *se-[e-nu]*
ina pa-ni

rev.

13. ^{md}AG-ŠEŠ.ME-GI A-šú šá ^{md}AG-KAL
14. 104 UDU.BAR.GAL.ME
15. 5 MÁŠ.GAL IGİ-*ir*
16. *ina ŠA-bi* 30 UDU.BAR.GAL *a-na ú-re-e*
17. 15 *a-na* SÁ.DUG₄ ITI.SIG₄ UD.22.〈KAM〉 UD.23.〈KAM〉
18. 7 *a-na* UDU.*pu-hal-lu-tu*
19. *a-na* ^{md}AG-MU-DÙ A ^mmar-duk
20. 43 *a-na* *re-*³ *ina* IGİ LÚ.SIPA SÁ.DUG₄
21. 47 (GUN) 25 1/2 MA.NA [x x] [7]
22. ITI.SIG₄ UD.13.KAM MU.〔41〕.〔KAM〕
23. ^dAG-NÍG.DU-ŠEŠ LUGAL [TIN.TIR.KI]

The text is discussed briefly by Govert Van Driel, "Neo-Babylonian Sheep and Goats," *Bulletin on Sumerian Agriculture* 7 (1993): 231 and Erlend Gehlken, *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv, I: Texte verschiedenem Inhalts, Ausgrabungen in Uruk-Warka Endberichte, Band 5* (Mainz am Rhein: von Zabern, 1990), 27.

Line 4 The signs are written PAR TI, which may be transposed from the following line (i.e., BABBAR-*ti*).

Line 14 As van Driel points out ("Sheep and Goats," 231) the lambs are called *kalūmu* in line 3 and *parru* here. Also, the number of sheep received is nine more than those that are accounted for in the following lines, in addition to which the five goats received are not accounted for at all.

Line 18 *puhallūtu* is unparalleled, but almost certain. Gehlken (*Uruk* I, 27) reads: *a-na* UDU.*pu-hal* DAB-*tu* *a-na* PN.

Line 21 The number given here, 47 talents and 25½ mina (of wool), contemplates a herd size, at the contractual rate of 1½ mina of wool per sheep, of 1897 animals, which is the exact total of reported rams and ewes (lines 1-2, see also here, Chapter Two, pp. 22ff).

(1-5) 267 rams, 1630 ewes, 250 male lambs, 420 female lambs, a total of 2567 “whites;”

(6-10) 16 he-goats, 21 she-goats, 7 young male goats, 6 young female goats, a total of 50 “blacks;”

(11-13) a grand total of 2617 sheep and goats under the responsibility of Nabû-ahhē-šullim/Nabû-udammiq.

(14-15) 104 *parru* male lambs and 5 he-goats were received (from him).

(16-20) Of which, 30 *parru* male lambs (are given) to the *bīt urî*, 15 (are to be used) for the *sattukku* offerings of the twenty-second and twenty-third days of month III (Simanu), 7 (are) put to stud, (issued) to Nabû-šuma-ibni/Marduk, and 43 (given) to pasture under the responsibility of the offering shepherd.

(21) 47 talents $25\frac{1}{2}$ mina of (wool) [...] [7].

(22-23) The thirteenth day of month III (Simanu), forty-first(?) year of Nebuchadnezzar, king of Babylon.

GCCI 1 252 is an amalgam of a livestock inventory (lines 1-13, 22-23), notations about allocations of animals (14-20), and a short, broken notation about wool and perhaps goat hair (line 21). The second section of this text matches the schema of YOS 7 143. The majority of allocated animals are given to the *bīt urî* and the offering shepherd. Moreover, GCCI 1 252 uses the same language as YOS 7 143 to describe this allocation, in that livestock is (given) to the *bīt urî* (*ana bīt urî*) and (placed) under the responsibility of the offering shepherd (*ina pan rē’i sattukki*). Smaller numbers of animals were given directly for sacrifice or distributed out. Moreover, male sheep and goats make up the total animal intake, which we shall see is a general rule for transfers from the external management.

One finds the basic formula of x animals (that) were received from PN, then placed under the responsibility of the offering shepherd or given to the *bīt urî*, in many texts from the Eanna archive. This basic formula may be expressed in a number of ways. Each phrase of this formula may be given in great detail, as is the case in YOS 7 143, which lists different types of sheep and goats received, gives the intake from several members of the external management, and also details the distribution of animals that were taken in by the temple. Yet this formula also appears in its rudimentary form in administrative receipts and notes, as, for example, YOS 17 70.

YOS 17 70
Uruk (Eanna)

17-XI-21
Nebuchadnezzar II

obv.

1. 10 UDU SÁ.DUG₄.MEŠ
2. šá ^{md}AG-SUR *u* ^mMU-DU
3. A.MEŠ šá ^{md}AG-ŠEŠ-KAM
4. ^mŠEŠ-lu-mur LÚ.SIPA-ŠÚ
5. IGI-*ir*

lo.e.

6. IGI ^mTUKUL-*ti-d*AMAR.UD
7. LÚ.SIPA.SÁ.DUG₄

rev.

8. ITI.ZÍZ UD.17.KAM MU.21.KAM
9. ^dAG-NÍG.DU-ŠEŠ LUGAL TIN.TIR.KI

(1-7) 10 sacrificial sheep of Nabû-ētir and Šuma-ukīn, the sons of Nabû-aha-ēreš, were received from his shepherd Aha-lūmur; (the animals are) under the responsibility of Tukulti-Marduk the offering shepherd.

(8-9) The seventeenth day of month XI (Šabaṭu), twenty-first year of Nebuchadnezzar, king of Babylon.

Texts of this sort are difficult to interpret, and others may understand them differently. The text indicates that the two brothers (*via* their shepherd⁴⁰) sent animals to the temple for offerings, and that the animals, having been received by the temple, were put under the responsibility of the offering shepherd. Other texts of this sort are GCCI 1 216 (here, p. 158), Moore Michigan Coll. 20, Sack, *Cuneiform Documents* 30, Spar, *Studies* 12, UCP 9/1, 38, and YOS 17 71.⁴¹

YOS 17 71
Uruk (Eanna)

07-VIII-21
Nebuchadnezzar II

- obv.
1. 19 UDU.BAR.GAL 「šá」
 2. ^{md}AG-NUMUN-BA-šá A ^m*ia-ma!*-²*a*
 3. *a-na* SÁ.DUG₄ šá ITI.APIN
 4. IGI-*ir*
- lo.e.
5. IGI ^mTUKUL-*ti-d*AMAR.UD
 6. A ^mNÍG.DU *u m**ki-rib-tú*
- rev.
7. A ^{md}EN-PAP
 8. ITI.APIN UD.7.KAM MU.21.KAM
 9. ^dAG-NÍG.DU-[PAP LUGAL TIN.TIR.KI]

(1-7) 19 *parru* male lambs of Nabû-zēra-iqīša/Iama'a for the *sattukku* offerings of Arahsamna have been received (from him); (they are) under the responsibility of Tukulti-Marduk/Kudurru and Kiribtu/Bēl-nāṣir.

(8-9) Seventh day of month VIII (Arahsamna), twenty-first year of Nebuchadnezzar, king of Babylon.

⁴⁰ Oftentimes texts of this sort mark deliveries of animals sent via family members. In YOS 17 75:9f. (see here, pp. 156f.), for example, the animals are received from Marduk-erība/Šulaja, the brother of Nanā-iddin, and UCP 9/1, 38:1ff. reads: 50 *immer sattukki ša Bēl-aha-iddin/Inī-ili Nanā-apla-ibni aplišu mahir*, “50 sacrificial sheep and goats of Bēl-aha-iddin/Inī-ili were received from his son Nanā-apla-ibni.”

⁴¹ GCCI 1 88, although quite broken, may belong in this category of text as well.

In this text, male lambs are received from Nabû-zēra-iqīša and put under the control of two well-known offering shepherds for the *sattukku* offerings of the current month.

Another text, but with exceptional details, is GCCI 2 132.

GCCI 2 132
Uruk (Eanna)

15-IV-00
Bardija

- obv.
1. 28 UDU.*ka-lum*.MEŠ
 2. *ina qa-bu-ut šá* ^{md}AG-KÁD
 3. A ^mDÙ.^d15 *a-na*
 4. NÍG.GA IGI-*ir*
- lo.e.
5. IGI ^m*ina-GIŠ.MI-a*
 6. LÚ.SIPA SÁ.DUG₄
- rev.
7. ITI.ŠU UD.15.KAM
 8. MU.SAG NAM.LUGAL.LA
 9. ^m*bar-zi-ia*
 10. LUGAL TIN.TIR.KI
 11. LUGAL KUR.KUR

(1-7) 28 male lambs, from the fold of Nabû-kāśir/Ibni-Ištar, were received for the assets (of the Eanna); (the animals are) under the responsibility of Ina-šillija the offering shepherd.

(7-11) The fifteenth day of month IV (Du'ūzu), accession year of Barzija, king of Babylon, king of lands.

The mention of the *qabuttu*, one of the telltale signs of the external management,⁴² in GCCI 2 132 indicates that the livestock in this text originated with the external management, and that the text records a transfer of that livestock from this member of the external management to the offering shepherd (and thus the Eanna). Texts of this sort could serve either to mark extractions from the herd of a member of the external

⁴² See here, Chapter Three, pp. 42f.

management (or, put another way, a credit to his account), or to mark debits for the offering shepherd (i.e., animals for which he must later prove a discharged or continuing obligation). This same type of transition between the external management and the offering shepherd is expressed differently in YOS 17 75, an edition of which follows.

YOS 17 75
Uruk (Eanna)

27-X-03
Nebuchadnezzar II

obv.

1. 『UDU』.NITÁ SÁ.DUG₄ 『šá』 *ina šu*^{II} LÚ.SIPA.ME
 2. *ab-ku-nu* ITI.AB UD.27.KAM MU.3.KAM
 3. 10 šá^{md}AMAR.UD-NUMUN-DÙ A^mSIG₅-KUR
 4. 14 šá^{md}EN-ŠEŠ-[x] ŠEŠ-šú
 5. 10 šá^mŠEŠ!-^da-a A^mman-na-[ki]-DINGIR
 6. 24 šá^{md}U.GUR-DÙ A^mla-ba-ši
- lo.e.
7. 15 šá^{md}AG-PAP A^mza-bi-da
 8. [10] šá^mri-mut A^{md}na-na-a-MU
- rev.
9. PAP 83 UDU.NITÁ šá^{md}AMAR.UD-SU
 10. A-šú šá^mšu-la-a ŠEŠ-šú šá^{md}na-na-a-[MU]
 11. IGI-ir *ina pa-ni* ^mNÍG.DU LÚ.SIPA.SÁ.DUG₄
 12. ITI.AB UD.27.KAM MU.3.KAM
 13. ^dAG-NÍG.DU-ŠEŠ LUGAL TIN.TIR.KI

Line 3 The reading of the name SIG₅-KUR is unclear. David Weisberg (index to YOS 17, p. 48) suggests (with query) Mudammiq-māti.

(1-2) Sacrificial sheep that were brought in from the shepherds. Month X (Tebētu), day twenty-seven, year three.

(3-9) 10 from Marduk-zēra-ibni/Mudammiq-māti(?); 14 from Bēl-ŠEŠ-[x], his brother; 10 from Ahi-Aya/Manna-kī-ili; 24 from Nergal-ibni/Lābāši; 15 from Nabū-nāṣir/Zabidā; [10] from Rēmūtu/Nanā-iddin.

(10-11) A total of 83 sheep and goats, which were received from Marduk-erība/Šulaja the brother of Nanā-iddin; (the animals are) under the responsibility of Kudurru the offering shepherd.

(12-13) The twenty-seventh day of month X (Tebētu), third year of Nebuchadnezzar, king of Babylon.

This text is a multiple-entry example of the type of transaction marked by YOS 17 70 and others. It records intake that was received from the external management, but it differs from YOS 17 70 in that the various members of the external management are considered as a group.⁴³ As a matter of speculation, then, it seems likely that texts such as YOS 17 75 could serve *only* to mark debits for the offering shepherd, whereas texts such as GCCI 2 132, which record only one transaction from one member of the external management, could mark either a debit for the offering shepherd or a credit for the herdsmen.

Of all the people mentioned in texts apparently marking external-to-internal transactions, to the best of my knowledge only one occurs in more than one text. Isinaja/Dannu-Nergal is known from seven texts dating to the reign of Nebuchadnezzar II. One of these, YOS 17 72, is similar to the texts of the type under discussion.

YOS 17 72
Uruk (Eanna)

15-IV-21
Nebuchadnezzar II

obv.

1. 20 UDU.NITÁ.ME 1 *pag-[ra]*
 2. šá UDU.NITÁ PAP 21
 3. *mi-sin-na-a-a A ^mdan-ni-[^dU.GUR]*
 4. IGI-*ir ina* IGI [erasure]
- lo.e.
5. ^mTUKUL-*ti-*^dAMAR.UD
 6. *u "m*ki-rib-*ti*
- rev.
7. LÚ.SIPA SÁ.DUG₄
 8. ITI.ŠU UD.15.KAM MU.21.KAM
 9. ^dAG-NÍG.DU-ŠEŠ LUGAL TIN.TIR.KI

⁴³ See also YOS 17 76 and perhaps GCCI 1 88.

(1-7) 20 sheep and goats, one carcass of a sheep (or goat), a total of 21, were received from Isinaja/Dannu-Nergal, (they are) under the responsibility of Tukulti-Marduk and Kiribti, the offering shepherds (text sing.).

(8-9) The fifteenth day of month IV (Du'uzu), twenty-first year of Nebuchadnezzar, king of Babylon.

Although this text differs in some respects from the ones under discussion (the animals are not labeled “sacrificial,” and a carcass is mentioned), it is clear that Isinaja/Dannu-Nergal stands in a similar relationship with the offering shepherd as those people mentioned in the texts discussed above. This relationship is further illustrated by GCCI 1 216.

GCCI 1 216
Uruk (Eanna)

26-XII-26
Nebuchadnezzar II

obv.

1. 60 UDU.NITÁ.ME *[ina]* UDU.NITÁ.ME
2. šá *ina* IGI-šú ^m*i-sinl-na-a-a*
3. A ^m*dan-nu-*^d*U.GUR* IGI-*ir*
4. *ina* ŠÁ-*bi* 30 UDU.NITÁ.ME
5. *ina* IGI ^m*TUKUL-*^d*AMAR.UD*¹
6. LÚ.SIPA SÁ.¹DUG₄

rev.

7. ITI.ŠE UD.26.KAM
8. MU.26.KAM
9. ^dAG-NÍG.DU-ŠEŠ
10. LUGAL TIN.TIR.KI

(1-6) 60 sheep and goats, from the sheep and goats that are under his responsibility, have been received from Isinaja/Dannu-Nergal. Of these, 30 sheep and goats (are) under the responsibility of Tukulti-Marduk, the offering shepherd.

(7-10) The twenty-sixth day of month XII (Addaru), twenty-sixth year of Nebuchadnezzar, king of Babylon.

Three other texts with this Isinaja/Dannu-Nergal mark the receipt of sheep and goat carcasses.⁴⁴ In addition to texts marking the receipt of animals and carcasses from him, GCCI 1 140 marks, in the briefest possible way, the fact that animals were put under his responsibility as well.⁴⁵

GCCI 1 140
Uruk (Eanna)

28-III-21
Nebuchadnezzar

1. 61 UDU SÁ.DUG₄
2. *ina IGI m̄īl-sin-na-a-a*
3. ITI.SIG₄ UD.28.KAM
4. MU.21.KAM
5. ^dAG-NÍG.DU-ŠEŠ
6. LUGAL TIN.TIR.KI

(1-3) 61 sacrificial sheep and goats (are) under the responsibility of Isinaja.

(4-6) The twenty-eighth day of month III (Simanu), twenty-first year of Nebuchadnezzar, king of Babylon.

This handful of texts probably constitutes a small percentage of those that Isinaja brought forth for an audit of his account. That is, Isinaja was a livestock manager of the Lady of Uruk from at least the twenty-first year until the twenty-sixth year of Nebuchadnezzar's reign. At some point during or after Nebuchadnezzar's twenty-sixth year the Eanna audited his account, and Isinaja then produced the living animals under his responsibility as well as the texts marking extractions from and additions to those animals over the years.

⁴⁴ Gehlken, *Uruk* I no. 34 (Nbk 27-VI-22), YOS 17 98 (Nbk 13-V-26), and YOS 17 99 (Nbk 29-XI-22).

⁴⁵ YOS 17 80 (Nbk 24-III-21) also mentions a similar transfer to an Isinaja four days before GCCI 1 140.

Yet I am hesitant to call Isinaja a member of the external management because he is credited for producing carcasses. In fact, YOS 17 72 suggests that the Eanna credited him equally for both live animals and carcasses.⁴⁶ The animals might have died in such a way that they were still somehow useful for the Eanna; perhaps carcasses were credited as live animals when they could be sold, when the skins and wool were still salvageable, or perhaps when the animals died in transition. It is also possible that Isinaja did not have a share-breeding relationship with the Eanna. Perhaps his herd was managed directly by the temple and therefore he had to account for every animal under his responsibility.⁴⁷ Another possibility is that Isinaja was connected to the *bīt urī*. Whatever the case may be, after the audit of his account these short administrative texts became functionally worthless. They were probably used as fill or buried as trash, and remained so until they were dug up by illegal excavators in the late 1800s and distributed to different museums and collections around the world.

In general, though, it must be admitted that these short administrative texts present the situation rather obscurely, and different interpretations of them are possible.⁴⁸ They do, however, highlight some important aspects of the relationship between the offering

⁴⁶ Other credits for carcasses from people who are not offering shepherds are found in GCCI 1 29, GCCI 1 97 (carcass of an *irbu* animal), GCCI 1 157 (five carcasses of sheep that died in a fire), GCCI 2 305, Gehlken, *Uruk* I nos. 34-35, Oberhuber SAKF 148, Sack, *Cuneiform Documents*, 27, YOS 17 72 (1 carcass with 20 sheep and goats, see here, pp. 157f.), YOS 17 97-99. On the sale of sheep and goat carcasses, see here, Chapter Two, p. 17f. note 12.

⁴⁷ An Isinaja is called the shepherd (LÚ.SIPA) in GCCI 1 109:11f.

⁴⁸ On similar problems associated with the receipt of cattle in Ur III times, see Marc Van De Mieroop, "Accounting in Early Mesopotamia: Some Remarks," in *Creating Economic Order: Record-keeping, Standardization, and Development of Accounting in the Ancient Near East*, eds. Michael Hudson and Cornelia Wunsch (Bethesda: CDL Press, 2002), 49.

shepherd and the external management. Of particular interest is that the number of sheep transferred to the offering shepherd from the external management at any given time is not large. Some texts record the transfer of one animal.⁴⁹ This corresponds to evidence from texts dealing with extractions from the external management.⁵⁰

In addition to this, it must be stressed that male lambs constitute the vast majority of external-to-internal transfers. YOS 7 8 differentiates between the sheep and goat intake deriving from the external management and animals that derive from the other sources of intake. Line 7 labels those animals taken from the external management as *parru* (UDU.BAR.GAL), male lambs, and *urišu* (MÁŠ.GAL), he-goats. The other categories of intake refer only to UDU.NITÁ, the collective term for male and female sheep and goats (although in YOS 7 8 it refers only to sheep, as goats are counted separately). Thus, YOS 7 8 is careful to mark intake from the external management as male, even though the ambiguous UDU.NITÁ was readily available for scribal use. Moreover, in the internal audit YOS 7 143, males constitute the vast majority of sheep and goats taken from the herdsmen; a small number were barren female sheep and goats (U_g.SAL.MAH_x and UZ.SAL.MAH_x), which were consumed in lieu of barley rations or silver payments.⁵¹ One

⁴⁹ E.g., BIN 1 147 and GCCI 1 149:1f. and 11f.

⁵⁰ See here, Chapter Three, pp. 80f.

⁵¹ On this see as well Michael Jursa, "Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery," *Iraq* 59 (1997): nr. 3 (p. 101f.). The consumption of barren ewes (U_g.UDU.SAL.MAH_x) is the subject of two large lists. BIN 1 174 (Nbn 27-IV-14) lists 95 U_g.SAL.MAH_x ša ina qāt Šulaja aplišu ša Šamaš-zēra-ibni abkanimma(text: *ab-ka-na-ma*) ana kaspi u uṭṭati nadna(text: *ni*), "95 barren ewes which were brought forth by Šulaja/Šamaš-zēra-ibni and sold for silver or barley." The text then divides into two sections: one section reads 1 (or 2) *ana* x GUR PN, "one (or two ewes) for (the equivalent of) x GUR (of barley) PN; the second section reads 1 *ana* x GÍN PN, "one (ewe) for (the equivalent of) x shekel of silver PN." The second text, YOS 19 213, is an account of the sale of barren cows and ewes (ÁB.ME 保住 U_g.MEŠ.SAL.MAH_x) from the first to the thirteenth year of Nabonidus (on this text, see Jursa, "Accounting," 156). Parallel transactions are found in YOS 7 143 (see here, pp. 147ff.).

finds the collective term UDU.NITÁ used most often in administrative receipts, although some make explicit mention of male sheep.⁵² These texts rarely, if ever, mention female sheep. In addition, legal texts obligating the external management to deliver animals to the temple refer primarily to male sheep when they do not use the term UDU.NITÁ.⁵³

In sum, the evidence shows that the external management was the primary supplier of sheep and goats to the temple and that the bulk of that intake was allotted to the internal livestock management. The offering shepherd is the better documented of the two main branches of the Eanna's internal livestock management. He was not a shepherd in the traditional or professional sense; his tasks were not to increase the temple's herds or, for example, to manage the business end of livestock management. He and his staff primarily took responsibility for preparing the animals for ritual slaughter. This is evidenced by the fact that the vast majority of animals under the responsibility of the offering shepherd were young males, and, as we shall see, that the offering shepherd distributed out to the external management the female animals that did happen to come into his possession. Moreover, it is also clear that the animals were allotted to the offering shepherd in small numbers frequently, and not, for example, in large deliveries a few times a year. The evidence suggests that he kept a one-to-three month supply of animals on hand at any given time.

The issuance of barren ewes in lieu of silver or barley rations is the only unequivocally non-prebendal consumption of animals at the Eanna temple of which I am aware.

⁵² E.g., GCCI 2 132:1 (see here, p. 155), YOS 17 71:1 (here, p. 154), YOS 7 193:13ff., and GCCI 1 400:15. Gehlken, *Uruk* II no. 164 appears to note intake of animals and animal products (although it is quite broken), and male and goats lambs appear throughout. Gehlken, *Uruk* II no. 163, a herd *amirtu*, also notes extractions in male lambs.

⁵³ See, for example, TCL 13 162 (here, Chapter Three, pp. 97f.)

II.A.3. The *bīt ridūti* and Royal Offerings

Returning to YOS 7 8, the second-largest supplier of sacrificial livestock to the offering shepherd was the *bīt ridūti* and the *niqē šarri* (“royal offerings”); these are counted as one set and they make up just over one-fifth of the total animals. To the best of my knowledge, YOS 7 8:8f. is the only mention of the *bīt ridūti* in Eanna texts. One does find the royal offerings in Eanna texts, but never in association with the offering shepherd. I discuss these offerings in detail in the *bīt urī* section of this chapter,⁵⁴ as there is some textual evidence that associates the two. The fact that neither the *bīt ridūti* nor royal offering appears in administrative notes or receipts in association with the offering shepherd is interesting, especially in view of the fact that one does find *irbu* intake, which constitutes a minute part of the total animal intake in YOS 7 8, in such texts.

Clearly YOS 7 8:8f. marks a transfer from the royal establishment to the offering shepherd. In TCL 12 123, which we discuss in detail below, animals for the royal offerings are sent by royal officials, and are either set aside for the Eanna (*ana Eanna parsu*) or given to the *bīt urī* (*ana bīt urī SUM-na*). Those animals allotted to the Eanna must include some turned over to the offering shepherd. Unlike the other entries in the audit, YOS 7 8:8f. attaches the note *ša Šūzubu ultu bīt gizzi ībuku*, “which Šūzubu (the offering shepherd) took from the shearing shed.” This is very similar to the phrase that mentions the procurement of animals from the external management in the audit text

⁵⁴ Here, pp. 177ff.

YOS 7 143:22f., *naphar* 793 UDU.ME ša ina Du'ūzu u Abu MU.3.KAM *Kambuzia šar*
Bābili šar mātāti ina muhhi gizzi ina qāt nāqidī šabtūnu, “a total of 793 sheep and goats
 which in months IV and V (Du'ūzu and Abu), year three of Cambyses, king of Babylon,
 king of lands, were taken at the shearing from the herdsmen.” There is nothing to
 indicate that animals retained their “royal offering” status after they entered into the
 responsibility of the offering shepherd, and, in fact, it appears that they were sacrificed
 through the normal channels.⁵⁵ This is in marked contrast to *irbu* animals, which
 remained *irbu* animals as they were transferred around the Eanna’s bureaucracy.⁵⁶
 Therefore, animals for the royal offerings may seem to be absent from administrative
 texts only because they are not designated as such. Also, the transfer of animals from the
 royal administration to the offering shepherd may have been a simple process in terms of
 bureaucracy and record keeping. This is in contrast to the care and maintenance of the
 Eanna’s own herds, which necessitated documentation at a variety of levels. It is also
 possible that the temple accounted for animals for royal offering separately, and that we
 have not yet found this section of the archive.

II.A.4. Sheep and Goats as *irbu*

The nature of *irbu*, which literally means “income,” is in need of comprehensive
 study. One finds many items in Eanna texts with the label *irbu*, such as barley, dates, and
 silver, but the origin of these items and the methods by which the temple procured them

⁵⁵ See here, Chapter Six, pp. 264f.

⁵⁶ See here, pp. 166ff.

remain unclear. I am aware of twenty-seven relevant texts, six (or seven) of which make the additional association with the offering shepherd.⁵⁷ To the best of my knowledge only two texts associate *irbu* livestock and the *bīt urī*.⁵⁸

Animals brought in as *irbu* are at times identified by the name of the original owner, usually x animals *irbu ša PN*, “the x *irbu* animals of PN.” If indeed *irbu* is an extraction by or donation to the temple, it is interesting to note that the requisitioned animals kept the *irbu* label as they made their way through the temple’s bureaucracy. For example, a legal text (YOS 6 77) dealing with the questioning of a doorkeeper about some lost or stolen sheep separately describes each of the first five animals as (lines 28ff.) *kalūmu ša PN*, “the male lamb of PN,” whereas it describes the final animal as 1 *parratu irbi ša ina pan PN*, “one female lamb, the *irbu* (sheep) which is under the responsibility of PN.” Also, a livestock inventory text of a well-known herdsman, GCCI 2 265 (see here, Chapter Six, pp. 253f.), lists his female sheep in the following way: (line 2) 802 U₈.ME *ina libbi 1 irbi*, “802 ewes, of which one is *irbu*,” and (line 4) 22 *parratu ina libbi 2 irbi*, “22 female lambs, of which 2 are *irbu*.” Thus, of 824 sheep the scribe made sure to note that three of these remained *irbu* sheep. Michael Jursa “Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery,” *Iraq* 59 (1997): no. 4 (p. 102), which in many ways resembles a livestock inventory text, adds 1 *parratu irbi*

⁵⁷ The following texts mention *irbu* in association with livestock; those with an asterisk (*) make a further association with the offering shepherd: AnOr 8 33*, BIN 1 148*, BIN 1 177, Durand Catalogue EPHE 442*, GCCI 1 5, GCCI 1 97 (carcass), GCCI 1 302, GCCI 1 400, GCCI 2 146, GCCI 2 223, GCCI 2 265, Gehlken, *Uruk* I no. 18*, Gehlken, *Uruk* I no. 44, Michael Jursa, “Neu- und spätbabylonische Texte aus den Sammlungen der Birmingham Museums and Art Gallery,” *Iraq* 59 (1997): n. 4 (p. 102), Moore Michigan Coll. 81, UCP 9/1, 43, YOS 6 28, YOS 6 77, YOS 6 145, YOS 7 8*, YOS 17 74, YOS 17 79, YOS 17 82*, YOS 17 83, YOS 17 89, YOS 17 321(*?, here, p. 185), and YOS 19 125.

⁵⁸ YOS 17 321:1 (here, p. 185) and Gehlken, *Uruk* I no. 18:12f.

(line 8') after the usual list of sheep and goats. Some texts resembling livestock inventory texts list only *irbu* animals.⁵⁹

Oftentimes texts further describe *irbu* as *ša MN* “of a (named) month.” YOS 17 79:7ff. describes 66 sheep and goats as *irbu ša ultu Ulūlu UD.27.KAM adi Arahsamna UD.27.KAM ina pan Marduk aplišu ša Aḥhēšaja nāqidi*, “*irbu* income which is from the twenty-seventh day of month VI (Ulūlu) until the twenty-seventh day of month VIII (Arahsamna), under the responsibility of Marduk/Ahhēšaja the herdsman.” Also, Gehlken, *Uruk* I no. 16 describes 6 *irbu* sheep (UDU.NITÁ) as *ša Tašrītu UD.8.KAM*, “of the eighth day of month VII (Tašrītu).”

Not enough information is available to understand the relationship between the temple and those who delivered *irbu* sheep to it. Interestingly, AnOr 8 33:9ff (see here, p. 67 note 60). mentions *irbu* animals from Belshazzar the crown prince, but this is an isolated instance. In general, though, those who owed *irbu* sheep—that is, the PN of *irbu ša* PN—are not members of the external livestock management. One finds the herdsmen taking responsibility for *irbu* animals after they are filtered through the Eanna’s bureaucracy. In fact, at times we are only aware of the original owner of *irbu* animals because he happens to be mentioned along with other information on how the temple dealt with *irbu* animals. For example, YOS 7 145:1-9 reads:

143 U₈.HI.A 4 *kalūmu* 60 *parrātu naphar* 207 U₈.UDU.HI.A *muššerētum ša ahullā*² *ša Idiglat irbi ša Nabû-ēreš Nabû-bēlšunu u aḥhēšu mārē ša Rēmūtu aplišu ša Kunâ makkûr Ištar Uruk u Nanâ ana qabuttu ina pan Nabû-ēreš aplišu ša Nabû-mukîn-apli.*

⁵⁹ E.g., YOS 6 28.

143 female sheep, 4 male lambs, 60 female lambs, a total of 207 sheep, free-grazing on the other side of the Tigris, the *irbu* of Nabû-ēreš, Nabû-bēlšunu and their (! text sing.) brothers, the sons of Rēmūtu/Kunâ, the property of Ištar of Uruk and Nanâ, (placed) in the fold under the responsibility of Nabû-ēreš/Nabû-mukīn-apli.

This text describes the *irbu* animals in three ways: belonging to a group of brothers; the property of Ištar and Nanâ; and placed “in the fold” under the responsibility of Nabû-ēreš/Nabû-mukīn-apli. Another type of chain of proprietorship is evident in BIN 1 148, an administrative receipt, an edition of which follows:⁶⁰

BIN 1 148
Uruk (Eanna)

29-IX-22
Nebuchadnezzar II

- obv.
1. 1 MÁŠ.TUR *ir-bi šá* ^mNUMUN-*ia*
 2. A-ŠÚ *šá* ^{md}EN-MU-GAR-un *šá a-na*
 3. *re-’i a-na* ^{md}AG-GI *paq-du*
 4. ^{md}AG-GI A-ŠÚ *šá* ^mNÍG.DU
 5. LÚ.¹SIPA¹ SÁ.DUG₄ IGİ-*ir*
 6. [*a-na(?)*] ^mDIN-su A-ŠÚ *šá* ^m*haš-di-iá* SUM
- rev.
7. ITI.KAN UD.29.KAM MU.22.KAM
 8. ¹dAG¹-NÍG.DU-PAP LUGAL TIN.TIR.KI

(1-6) One young he-goat, the *irbu* of Zērija/Bēl-šuma-iškun, which was entrusted to Nabû-ušallim for grazing, has been received from Nabû-ušallim/Kudurru the offering shepherd (and) given (to) Balāssu/Hašdija.

(7-8) The twenty-ninth day of month IX (Kislīmu), twenty-second year of Nebuchadnezzar, king of Babylon.

Why did sheep and goats keep the *irbu* label as they moved around the Eanna’s bureaucracy, even retaining it after they were redistributed to the external management?

⁶⁰ See as well AnOr 8 33:14ff., where *irbu* animals are described as “of Belshazzar” and taken in; some of them are put under the responsibility of a Šūzubu (who is certainly the offering shepherd of the same name), and others are redistributed to a member of the external management (line 16 *ana qabutti ina pan PN*). GCCI 1 302 also mentions 136 small and large (line 2: *gal-la-ti u GAL-ti*) *irbu* animals of month IV (Du’uzu) that are put under the responsibility of three known herd supervisors.

Moreover, why were *irbu* animals taken in and given out, and not, for example, treated in the same way as intake from the external management was treated? Although these questions cannot be completely answered with the available evidence, most texts mentioning *irbu* have a certain characteristic that may hint at the administrative importance of these animals. In the following table (Table 4.2) I list all of the legible references to *irbu* sheep and goats of which I am aware from the relevant period of the Eanna archive, with a short summary of the types of sheep and/or goats mentioned.

Table 4.2: Eanna texts mentioning *irbu* in sheep and goats

Text	Female lamb	Male lamb	Ewe	Ram	Young female goat	Young male goat	She-goat	He-goat
AnOr 8 33	34	20	2		7			6
BIN 1 148						1		
Gehlken, Uruk I no. 18	2	2	7					
Gehlken, Uruk I no. 44	1							
Durand Catalogue EPHE 442	1	1 ^a	1					
GCCI 1 5			11 ^b		5		6	1
GCCI 2 146						5		
GCCI 2 223					7		12	
Jursa, Iraq 59 nr. 4	1							
Moore Michigan Coll. 81		1						
UCP 9/1, 43	4		7	1				
YOS 6 28	6	2	21			3	5	2
YOS 6 77	1							
YOS 6 142 ^c	11	5	38	3	2		10	11
YOS 7 15			1					
YOS 7 145	60	4	143					
YOS 17 74	30		80 ^b			1	2	1
YOS 17 79		8 ^a	41				2	1
YOS 17 82	4 ^d	4 ^e	62 ^f		2 ^g	2 ^h	4 ⁱ	
YOS 17 83					1		2	
YOS 17 87	[x]+4	[x] ^a	[x]+4	24	[21]	[41]	21	4
YOS 17 89 ^j						13	1	
YOS 19 125 ^k	208	2						
Minimum Total	367	49	418	28	26	29	65	26
	Female lamb	Male lamb	Ewe	Ram	Young female goat	Young male goat	She-goat	He-goat

Note: Animals listed only as UDU.NITÁ, *sēnu*, or *puhādu* are not included here.

^a Here called *parru* (UDU.BAR.GAL).

^b Ewes (capable of) lambing (Ù.TU).

^c Although *irbu* is not specifically used in this text, it describes the total animals as ša ITI.ŠE, which is characteristic of *irbu* texts.

^d There are two mentions of 2 female lambs in this text, lines 5 and 17.

^e There are two mentions of 2 male lambs in this text, lines 4 and 16.

^f There are two mentions of ewes in this difficult text. The first mention of 34 ewes (lines 1-3) is divided into 26 U₈ [pi-qid LÚ.x-x¹], 8 U₈ ga-az-ze-e-ti; the second (line 10) is just 28 ewes.

^g There are two mentions of 1 young female goat in this text, lines 12 and 20.

^h There are two mentions of 1 young male goat in this text, lines 11 and 19.

ⁱ There are two mentions of 2 she-goats in this text, lines 6 and 18.

^j This text also mentions two ambiguous UDU.MEŠ in line 3.

^k This text also mentions UDU.NITĀ in lines 1 and 3.

Almost every instance of *irbu* deals exclusively or predominantly with female sheep and goats, and there is a surprising preponderance of older female animals.⁶¹ Although the text corpus is limited, the prevalence of females in association with *irbu* cannot be coincidental or haphazard, especially when contrasted with intake from the external management, which consists overwhelmingly of male animals. Thus, it is evident that *irbu* animals, whatever their origin may have been, were a secondary source of female sheep and goats for the Eanna (i.e., apart from those born to its own ewes). It is unfortunate that we do not know more about those who gave *irbu* to the temple. The appropriation of female animals by the temple would have been a transfer of animal capital from an outside source, as compared to the collection of expendable and disposable males.

The association between the offering shepherd and *irbu* income is curious. As I argue above, the offering shepherd was not a sheep breeder, and it is certain that viable female sheep were too valuable to sacrifice. Given the preponderance of female sheep associated with *irbu* it is certain that the 261 *irbu* sheep mentioned in YOS 7 8:10 (see here, pp. 137ff.) as income of the offering shepherd made up the bulk of the 274 female lambs redistributed to the external management later in the text (line 21). It is unclear

⁶¹ Noted by van Driel, "Sheep and Goats," 246 (endnote 46).

why these female sheep passed through the control of the offering shepherd if the eventual aim was redistribution to the external management. It is possible that the offering shepherd was the Eanna's point of contact for the herdsmen, both in terms of animal intake and outlays. The few clear things about *irbu* sheep and goats in association with the internal management show that it is a topic ripe for further exploration when more evidence arises.

III. The *bīt urī*

Reconstructing and analyzing the administration of the *bīt urī*⁶² is considerably more difficult than reconstructing the bureau of the offering shepherd. The *bīt urī*—or properly the *bīt urī ša Bēlti ša Uruk*⁶³ “the *bīt urī* of the Lady of Uruk”—named as such occurs less frequently in texts than does the offering shepherd, even though it appears to have been an equally, if not more, important department of the Eanna's livestock management. The fact that *bīt urī* was concerned with cattle, which is not the case with the offering shepherd, indicates that its purpose was different from the purpose of offering shepherd. Moreover, personnel from the *bīt urī* are difficult to identify. There was no *rab bīt urī*, or a profession called *ša bīt urī*, or the like. Yet at the same time a group of professions and “houses” in all likelihood belong to the *bīt urī*. Key types of documentation do not exist or have not been published. For example, as yet no audits or settlement of accounts are known for the *bīt urī* or any of its departments. As I discuss below, it is likely that texts reference the *bīt urī* as a location—that, in effect, it was not an actual corporate wing of

⁶² I will use *bīt urī* throughout, although it is at times referred to as the *urū*. It is commonly translated “fattening stable” or the like in other languages.

⁶³ The full name is found in TCL 13 164:13, YOS 7 182:5f., and YOS 7 190:6.

the administration, but instead a place where stock houses and stock feeders operated, and that the term was used for expository convenience for its departments as a whole.

Most of the evidence for the intake and outlays of the *bīt urî* occurs in tandem with that for the offering shepherd, and it therefore need only be discussed here in summary as it almost completely lacks independent context. The fact that the *bīt urî* and the offering shepherd often occur together shows that at least one function of the *bīt urî* was a counterpart to the overall function of the offering shepherd. This is reinforced by the fact that the two occur together both in texts that mark animal intake and in those that mark outlays. Yet at the same time it is clear that the *bīt urî* functioned in ways that are not paralleled by the bureau of the offering shepherd. This is most evident in the fact that the *bīt urî* dealt with cattle (whereas the offering shepherd does not). Moreover, a few texts seem to imply that disbursals from the *bīt urî* were *ad hoc* and not intended for sacrificial offerings, a phenomenon which is as yet unparalleled in texts associated with the offering shepherd. For example, there is the letter YOS 3 122.

YOS 3 122
Uruk (Eanna)

Undated

- obv.
1. IM ^{md}EN-GI
 2. *a-na* ^{md}MAŠ-LUGAL-PAP
 3. AD-šú ^dBE
 4. *u* ^ddam-ki-an-na
 5. šu-lum *u* DIN šá AD-iá
 6. *liq-bu-ú al-te-me*
 7. *um-ma* ^{md}AG-NUMUN-MU
 8. LÚ.GAL *nu-uḥ-tim-mu*
 9. *il-la-ka*
 10. *ina im-šat mim-ma*
 11. *hi-šiḥ-ta-a*
 12. *ina IGI-ka*
 13. *al(!)-ta-ap-[ra]*
- lo.e.
14. *en-na a-na*
- rev.
15. AD-ia *al-tap-ru*
 16. 1-en UDU.NITÁ šu-ku-lu
 17. šá ú-ru-ú
 18. AD-ú-a *ina ŠU*^{II}
 19. ^{md}AG-PAP *liš(!)-pu-ru*
 20. *ki-i i-ba-áš-šú-ú*
 21. *gi-da-a-ta*
 22. *u šá-šá-al-la*
 23. *šu-bi-la mim-ma*
 24. *ma-la haš-ha-a-ta*
 25. *a-na lib-bi a-na*
 26. AD-ia *a-nam-din*
 27. UDU.NITÁ
 28. *bab-ba-nu-ú*
 29. *[liš]-pur*
 30. *tè-en-ka kap-du lu-uš-me*

Originally edited in Ebeling, *Neubab. Briefe*, 122 (C. 122)

(1-6) A letter of Bēl-ušallim to Ninurta-šarra-uṣur, his father. May Ea and Damkiana decree the health and life of my father.

(6-15) I have heard that Nabū-zēra-iddin, the chief baker, is coming. Yesterday I sent to you my every need, (so) now I have written [or: I am writing] to my father (again).

(16–30) My father should send one fattened sheep from the *bīt urī*, via Nabû-nâṣir. If they are available, send sinews and hoof tendon(s). Whatever you may require I will gladly give to my father. He should send me one excellent sheep. Let me hear your instruction soon.

It is uncertain whether the sheep from the *bīt urī* is requested on account of the visit of the chief baker, although that seems to be the case. That notwithstanding, there is nothing in this letter to indicate that the sheep was used for sacrificial offerings.⁶⁴

The question of the make-up of the *bīt urī* is whether we should assume that groups of professions and “houses” in fact constitute the *bīt urī*, or whether they represent another part of temple livestock management altogether. These professions and places are *mušākil alpī* “the oxen feeder” and *mušākil immerī* “the sheep feeder” and *bīt alpī* “the oxen house” and *bīt immerī* “the sheep house” in addition to a few less well-known professions and houses.⁶⁵ The *mušākil alpī* and *mušākil immerī* both received temple rations, as did the men of the cattle and sheep stable (*sābū ša bīt alpī/immerī*).⁶⁶ It is, of course, possible that the *mušākil alpī* and *immerī* were the men of the cattle and sheep stables. Whatever the case may be, the receipt of temple rations establishes that these

⁶⁴ By contrast, compare the letter YOS 3 56:5-21, in which one finds specific requests for sacrificial oxen and sheep from the *bīt urī*: *Šattussu alpa ina Du'uzu ana Šamaš tašpura(!) enna alpu ... ana ginē ša Šamaš ša Arahsamna u Addaru ana bīt urī līrub u UDU.NITĀ ana ginē maṭū 20 30 UDU.NITĀ ana ginē ša Šamaš aḥūa lišpuru*, “yearly you used to send an ox to Šamaš in month IV (Du'uzu), now may an ox ... enter the *bīt urī* for the offerings of Šamaš in months VIII and XII (Arahsamna and Addaru). Sheep and goats (text sing.) for the offerings are lacking. My brother should send 20 or 30 sheep and goats (text sing.) for the offerings of Šamaš.”

⁶⁵ For a discussion of these professions, see Kümmel, *Familie*, 52f., and also note Gehlken, *Uruk I* no. 116:2f., which mentions the LÚ.šu-šá-ni-e šá GU₄ u UDU.NITĀ.

⁶⁶ See Kümmel, *Familie*, 52.

men belong to the internal management of the Eanna of Uruk. Kümmel, San Nicolò, and van Driel all take for granted that these professions belong to the *bīt urī*.⁶⁷

As yet there is no explicit evidence from the Eanna that makes the connection between the *bīt urī* and these various professions and houses.⁶⁸ In general, though, one is forced to deal with the fact that the *bīt urī* appears as a primary destination for livestock, and as a place from which the temple took livestock, but none of its personnel appear as such in the texts. Yet at the same time various players in the Eanna's internal livestock management appear in ration lists where one would expect the personnel of the *bīt urī* to appear. The professions of these people—e.g., sheep feeder—denote tasks that one may reasonably expect the personnel of the *bīt urī* to fulfill, but they possess no obvious hierarchy or internal organization. In other words, we know of a general location to which animals are allocated and from which they are taken, but we do not know who was employed at that location to care for the animals. At the same time we are aware of professions dedicated to the care of the Eanna's internal livestock, but we do not know their general organization. Therefore, I proceed under the assumption that the *bīt alpī*, *bīt immerī*, and the offices of the *mušākil alpī* and *mušākil immerī*, all belong to the *bīt urī*,

⁶⁷ See, for example, Kümmel, *Familie*, 52, San Nicolò, "Viehwirtschaft I," 286, van Driel, "Sheep and Goats," 226 and 245 (endnote 44).

⁶⁸ There may be a prosopographic connection between the *bīt urī* and the *mušākil alpī*. Gehlken, *Uruk I* no. 18:rev. 6' reads UDU.NITĀ *irbi ana urī ina pan Bibēa*, "irbu sheep and goats at the disposal of Bibēa." A Bibēa is also found connected to the *bīt urī* in YOS 17 86:4. The nature of the documentation is such that one rarely can ascribe a personal name to the *bīt urī*. That notwithstanding, one finds a Bibēa again in Durand *Textes babyloniens* 29:27, although here he is called a *mušākil immerī*. Since Bibēa is never supplied with a patronym, it is uncertain whether these texts refer to the same man, but that notwithstanding, all the texts date to the reign of Nebuchadnezzar II, and Bibēa is not a common name. This is evidence—of sorts—that the *mušākil immerī* was a member of the *bīt urī*. To the best of my knowledge, this remains the only plausible connection, prosopographic or otherwise, between the *bīt urī* and any of the various sub-departments.

and that the term *bīt urī* refers in general to the location at which they operated and is used in that way to refer to its departments as a whole.

Even with this expanded definition, the departments of the *bīt urī* still remain elusive. Apart from its mention alongside the offering shepherd, among published texts the *bīt urī* or its presumed departments only appear in nine livestock inventory texts,⁶⁹ seven administrative notes and receipts,⁷⁰ and five letters.⁷¹ Too few mentions of the *bīt urī* personnel are known to construct a meaningful prosopography. As mentioned above, a good number of texts associated with the *bīt urī* deal exclusively with cattle, and are thus out of the purview of this dissertation.

As with the offering shepherd, we do not know how the *bīt urī* functioned in the actual preparation of sacrificial livestock, apart from the obvious tasks indicated by the profession *mušākil immerī* (“sheep feeders”). If the tripartite division of sacrificial livestock described in religious texts—i.e., barley-fed, milk-fed, and non-barley-fed⁷²—holds true, the *bīt urī* most likely took charge of the barley-fed livestock, given that there are only a few references to feed in association with it.⁷³

⁶⁹ YOS 7 193:13, GCCI 1 252:16 (here, pp. 151f.), GCCI 1 400:17, GCCI 2 329:12(?), Moore Michigan Coll. 41, YOS 6 142:8, Durand Catalogue EPHE 474, Gehlen, *Uruk I* no. 13, UCP 9/1, 50.

⁷⁰ GCCI 1 330:3, YOS 17 126:7, AnOr 8 34, Ronald Sack, “Some Miscellaneous Neo-Babylonian Documents,” *JCS* 24 (1971/2):n.4, Moore Michigan Coll. 19, YOS 17 86:3, YOS 17 321:1 (here, p. 185).

⁷¹ YOS 3 19:35 (the *bīt alpi ša Eanna*), BIN 1 7:10 (the *bīt alpi ša šarri*), TCL 9 144:17ff., YOS 3 56:12f., and YOS 3 122:17 (see here, pp. 173f.).

⁷² See here, pp. 134f.

⁷³ For example TCL 12 80 mentions a man appointed to guard fodder at the *bīt urī*, and the letter TCL 9 144:17ff. mentions: *kis(!)-sat šá GU₄.MEŠ [u] UDU.NITÁ šá É ú-ru-ú*, “fodder of the oxen and sheep and goats of the *bīt urī*.” See also the brief discussion of the *bīt urī* in da Riva, *Ebabbar*, 272f. in which she

III.A. The Intake of the *bīt urî*.

There is nothing in the available evidence to counter the assumption that the primary suppliers of livestock to the *bīt urî* were the same as those who supplied the offering shepherd. That the *bīt urî* received livestock from the external management is made clear in YOS 7 143, in which 688 sheep and goats are transferred from the external management to it. Of these 645 were *kalūmu* male lambs, 35 *parru* male lambs, 2 were ewes, and 6 were goats, which follows much the same pattern as the intake of the offering shepherd. The *bīt urî* also appears as a destination for animals in some livestock inventory texts and administrative notes and receipts.⁷⁴ However, with this scant information it remains impossible to discern whether the external management supplied the bulk of the *bīt urî*'s livestock, as is the case with the offering shepherd's intake, although this seems likely.

For royal donations and royal offerings, we have TCL 12 123, a text which lists the cattle, sheep, and birds of the royal offering (*niqê šarri*), allocated to the Eanna from the first until the sixth year of the reign of Nabonidus. An edition of it follows.

discusses explicit evidence for the grain feeding of sheep and goats.

⁷⁴ See the discussion, here, pp. 171ff.

TCL 12 123
Uruk (Eanna)

xx-xx-05
Nabonidus

obv.

1. GU₄.MEŠ *u* UDU.NITÁ SIZKUR.MEŠ LUGAL šá MU.[x x x x (x)]
2. ^dAG-I LUGAL TIN.TIR.KI *a-na* É.AN.NA *par-su*

-
3. 16 GU₄.MEŠ [x ME]+ 60 UDU.NITÁ GAL-ú 80 UDU.NITÁ *šam-<mu>*
 4. 6 MUŠEN.KUR.GI 5 UZ.TUR 20 TU.KUR₄ 70 *sum-mu*
 5. 7 NUNUZ *lu-ur-mu* 18 NUNUZ UZ.TUR *ina lib-bi*
 6. 2 GU₄.MEŠ 52 UDU.NITÁ GAL.MEŠ 42 UDU.NITÁ *šam-mu*
 7. 4 MUŠEN.KUR.GI 5 UZ.TUR 12[+x MUŠEN.TU].KIL 13 *sum-mu*
 8. 7 NUNUZ *lu-ur-mu* 18 NUNUZ UZ.[TUR x x x] *a-na* SIZKUR LUGAL [(x x)]
 9. 14 GU₄.MEŠ 170[+x] UDU.NITÁ *a-na* É ú-ri-e SUM-na
 10. ITI.BÁR UD.26.[KAM MU.1.KAM] 8 GU₄.MEŠ 330 UDU.NITÁ
 11. GAL-ú 78 UDU.NITÁ [*šam*]-mu *ina lib-bi* 6 UDU.[NITÁ] GAL-[ú?]
 12. 6 UDU.NITÁ *šam-mu* [x x x] ITI.ŠE UD.5.[KAM MU.1.]KAM
 13. 2 GU₄.MEŠ 1 UDU.NITÁ [x x x IT].I.ŠE UD.[x. KAM]
 14. MU.1.KAM ^dAG-I LUGAL TIN.TIR.KI [x x x] 17 [GU₄?]
 15. 252 UDU.NITÁ *a-na* É [ú-ri-e] SUM-na
-
16. 200 UDU.NITÁ *ina ŠU^{II} mdAG-ŠEŠ.MEŠ-bul-[liṭ u m]SUM-nu-<nu>*
 17. ITI.BÁR UD.16.KAM MU.2.KAM ^dAG-I LUGAL TIN.TIR.KI
 18. *ina lib-bi* 192 UDU.NITÁ *a-na* É [ú]-ru-ú
 19. ú 8 UDU *pag-ra* *a-na* É.AN.NA SUM-na
-
20. 100 UDU.NITÁ *ina ŠU^{II} mÉ.AN.NA-MU-DÙ u mSUM-nu-nu* UD.13.KAM
 21. šá ITI.BÁR MU.[3.KAM] ^dAG-I LUGAL TIN.TIR.KI
 22. *ina lib-bi* 96 [UDU.NITÁ] *a-na* É [ú]-ru-ú SUM-na
 23. ú 4 UDU *pag-[ra]* *a-na* É.AN.NA SUM-na
 24. 24 GU₄.MEŠ 303 UDU.NITÁ GAL 78
 25. UDU.NITÁ *šam-mu* 12 MUŠEN.KUR.GI 5 UZ.TUR
 26. 40 MUŠEN.TU.KIL 23 *sum-mu* 8 NUNUZ *lu-ur-mu*
 27. SIZKUR.MEŠ LUGAL šá MU.3.KAM ^dAG-I
 28. LUGAL TIN.TIR.KI *a-na* É.AN.NA SUM-nu
 29. *ina lib-bi* 3 GU₄.MEŠ 12 UDU.NITÁ GAL-ú
 30. 26 UDU.NITÁ *šam-mu* 4 MUŠEN.KUR.GI
- rev.
31. 4 UZ.TUR 18 MUŠEN.TU.KIL 18 *sum-mu*
 32. 8 NUNUZ *lu-ur-mu* *a-na* É.AN.NA *par-su*
 33. ú 21 GU₄.MEŠ 234 UDU.NITÁ *a-na* ú-ru-u
 34. SUM-nu
-
35. 4 GU₄.MEŠ 110 UDU.NITÁ SIZKUR LUGAL *ina ŠU^{II} mdIM-nu-ri-i*
 36. ITI.SIG₄ UD.3.KAM MU.4.KAM ^dAG-I LUGAL TIN.TIR.KI
 37. *ina lib-bi* 2 GU₄ 18 UDU.NITÁ *par-su* [260]

38. UDU.NITÁ *ina ŠU^{II} LÚ.GAL sib-ti ina ITI.KAN MU.4.KAM*

39. 2 GU₄.MEŠ 40 UDU.NITÁ SIZKUR LUGAL *a-na É.AN.NA*
 40. *par-su* ITI.ŠE UD.7.KAM MU.5.KAM
 41. 260 UDU.NITÁ *ina ŠU^{II} LÚ.GAL sib-ti*
 42. *a-na ú-ri-e* MU.5.KAM

43. 5 GU₄.MEŠ 60 UDU.NITÁ *ina ŠU^{II} mdIM-nu-ri-i* ITI.SIG₄ UD.[x.KAM]
 44. MU.6.KAM 40 UDU.NITÁ *ina ŠU^{II} mdAG-BA-šá u mdUD-AD-ŠEŠ*
 45. A.MEŠ šá ^mha-an-ba-nu *ina ITI.ŠU* 20 UDU.NITÁ *ina ŠU^{II}*
 46. LÚ.ŠÁ UGU *qup-pu* 2 GU₄.MEŠ 20 UDU.NITÁ ITI.ŠU UD.4.KAM
 47. *a-na É.AN.NA par-su* 2 GU₄.MEŠ 20 UDU.NITÁ
 48. ITI.KIN UD.17.KAM [x GU₄.(MEŠ)?] 38 UDU.NITÁ
 49. *ina ITI.DU₆ par-su* [x x (x)] ITI.APIN UD.2.KAM
 50. 1 GU₄.MEŠ ITI.KAN UD.[x.KAM x] GU₄ 12 UDU.NITÁ
 51. *ina ŠU^{II} m'ina-ŠU^{II}-dEN-šá-kin* LÚ.SAG ITI.KAN UD.18.KAM
 52. 363 UDU.NITÁ [*ina ŠU^{II}*] LÚ.GAL *sib-ti*
 53. ITI.AB UD.22.KAM *ina ši-pir-ti šá* LÚ.GAL NÍG.ŠID
 54. šá ^{md}AG-BAD-DIN-*iṭ* LÚ.<*ši>-pi-ri iš-šá-* [?] *ina ITI.ŠE*
 55. 1 GU₄ 5 UDU.NITÁ 1 UDU.NITÁ *ka-lum* ^{md}AG-LUGAL-ŠEŠ
 56. [¹ME+30(?)] UDU.NITÁ ^mgab-bi-DINGIR.MEŠ-LUGAL-[ŠEŠ] LÚ.TIL.LA.GÍD.DA
 57. 5 GU₄.MEŠ ^{md}U.GUR-DÙ-uš LÚ.EN NAM
 58. 12 GU₄ ^mšu-<*ma*>-GI.NA 3 GU₄ 10 UDU.NITÁ
 59. ^mDÙG.GA-ia LÚ.GAR.KU 90 UDU.NITÁ ^mšil-la-a
 60. *u* ^{md}UD-KAM 19 UDU.NITÁ ^{md}[... x UDU.NITÁ]
 61. LÚ.GAL *sib-ti*
 62. 20 UDU.NITÁ LÚ šá UGU *qup-pu* 1 GU₄ 2 UDU.NITÁ ITI.ŠE UD.4.KAM *par-su* 1 GU₄
 3 UDU.NITÁ ITI.ŠE UD.5.KAM
 63. *par-su* 3 GU₄ 10 UDU.NITÁ ITI.ŠE UD.7.KAM *par-su* 1 GU₄ 13 UDU.NITÁ
 ITI.ŠE UD.20.KAM *par-su*

An edition of this text appears in Ellen Whitley Moore, *Neo-Babylonian Business and Administrative Documents* (Ann Arbor: University of Michigan Press, 1935), no. 123.

Line 15 Moore reads É.[AN.NA].

Line 56 Line may also begin 1 [ME] 40.

(1-2) Oxen and sheep and goats, the royal offerings which were set aside at the Eanna in the [x] year(s?) of Nabonidus, king of Babylon.

(3-15) 16 oxen, [x hundred] and 60 large sheep and goats, 80 pastured sheep and goats, 6 geese, 5 ducks, 20 turtledoves, 70 doves, 7 ostrich eggs, 18 duck eggs—of which, 2 oxen, 52 large sheep and goats, 42 pastured sheep and goats, 4 geese, 5 ducks, 12 [+ x] turtledoves, 13 doves, 7 ostrich eggs, 18 duck eggs [...] [were set aside] for the offering of the king; 14 oxen, 170 [+ x] sheep and goats were given to the *bīt urī*—the twenty-sixth of month I (Nisannu) [first year]. 8 oxen, 330 large sheep and goats, 78 pastured sheep and goats; of which, 6 large sheep and goats, 6 pastured sheep and goats [...]—the fifth of month XII (Addaru), [first] year. 2 oxen, 1 [...] sheep (or goat)—the [x] day of month XII, first year of Nabonidus,

king of Babylon. [...] 17 [oxen?],] 252 sheep and goats were given to the [*bīt urī*] (or: to the [Eanna]).

(16-19) 200 sheep and goats *via* Nabû-ahhē-bulliṭ and Iddinu, the sixteenth of month I (Nisannu), second year of Nabonidus, king of Babylon—of which 192 sheep and goats were given to the *bīt urī*, and 8 sheep and goat carcasses were given to the Eanna.

(20-34) 100 sheep and goats *via* Eanna-šuma-ibni and Iddinunu, the thirteenth of month I (Nisannu), [third] year of Nabonidus, king of Babylon—of which, 96 [sheep and goats] were given to the *bīt urī* and 4 sheep and goat carcasses were given to the Eanna.

24 oxen, 303 large sheep and goats, 78 pastured sheep and goats, 12 geese, 5 ducks, 40 turtledoves, 23 doves, 8 ostrich eggs were given to the Eanna (for?) the royal offering of the third year of Nabonidus king of Babylon—of which, 3 oxen, 12 large sheep and goats, 26 pastured sheep and goats, 4 geese, 4 ducks, 18 turtledoves, 18 doves, 8 ostrich eggs were set aside for the Eanna and 21 oxen and 234 sheep and goats were given to the *bīt urī*.

(35-38) 4 oxen, 110 sheep and goats, the royal offering, *via* Adad-nūrī, the third day of month III (Simanu), the fourth year of Nabonidus, king of Babylon—of which, 2 oxen and 18 sheep and goats were set aside; 260 sheep and goats *via* the *rab šibti* in month IX (Kislīmu), fourth year.

(39-42) 2 oxen and 40 sheep and goats, the offering of the king, were set aside for the Eanna, the seventh day of month XII (Addaru), fifth year; 260 sheep and goats *via* the *rab šibti*, (given) to the *bīt urī*, fifth year.

(43-63) 5 oxen and 60 sheep and goats, *via* Adad-nūrī, the [x] day of month III (Simanu), year six; 40 sheep and goats *via* Nabû-iqīša and Šamaš-aba-uṣur the sons of Hanbanu, in month IV (Du'ūzu); 20 sheep and goats *via* the *ša muhhi quppi*, and 2 oxen and 20 sheep and goats were set aside for the Eanna on the fourth of month IV (Du'ūzu); 2 oxen and 20 sheep and goats, seventeenth of month VI (Ulūlu); [x oxen?], 38 sheep and goats set aside in month VII (Tašritu); [...] the second day of month VIII (Arahsamna); 1 ox [x] day of month IX (Kislīmu); [x] oxen, 12 sheep and goats *via* Ina-qāt-Bēl-šakin, the official (*ša rēši*), the eighteenth of month IX (Kislīmu); 363 sheep and goats *via* the *rab šibti*, the twenty-second of month XI (Šabatū), on the written authorization of the “chief of accounts” (*rab nikkassi*), which (authorization) Nabû-mīti-bulliṭ the (alphabet) scribe delivered in month XII (Addaru); 1 ox, 5 sheep and goats, 1 male lamb, Nabû-šarra-uṣur; 130 (or 140) sheep and goats, Gabbu-ilānu-šarra-uṣur, the *qīpu*; 5 oxen, Nergal-ēpuš, the governor (*bēl pīhati*); 12 oxen, Šuma-ukīn; 3 oxen, 10 sheep and goats, Tābia, the governor (*šākin tēmi*); 90 sheep and goats, Ṣillā and Šamaš-ukīn; 19 sheep and goats, [PN] the *rab šibti*; 20 sheep and goats, the *ša muhhi quppi*, 1 ox and 2 sheep and/or goats were set aside on the fourth day of month XII (Addaru); 1 ox and 3 sheep and goats were set aside on the fifth day of month XII; 3 oxen and 10 sheep and goats were set aside on the seventh day of month XII; 1 ox and 13 sheep and goats were set aside on the twentieth day of month XII.

The opening lines of this text state that the sheep and oxen were set aside (*parsū*)⁷⁵ for the Eanna. The body of the text, with some exceptions,⁷⁶ describes animals as either set aside for the Eanna (*ana Eanna parsū*) or given to the *bīt urī* (*ana bīt urī SUM-na*). What the distinction is between the Eanna and *bīt urī* here remains unclear (there is no mention of the offering shepherd). Van Driel believes that the difference between animals set aside for the Eanna and those given to the *bīt urī* is that the former were consumed and the latter kept for future use.⁷⁷ It is also likely that the “Eanna” in this text included the bureau of the offering shepherd.

The transfers documented in this text derive from either the *rab sibti*, named royal officials, or from persons who are not given any further designation.⁷⁸ Given the name of the offerings, coupled with the fact that all the designations of officials who deliver animals are in some way connected with the Neo-Babylonian royal administration (and not, for example, with temple administration), it seems reasonable to assume that undesignated persons are connected to the royal administration as well. The *rab sibti* is discussed here, as he appears repeatedly in TCL 12 123.

Evidence from the Ebabbar archive confirms that the office of *rab sibti* was connected to the royal administration, as holders of it were recruited from the “courtiers”

⁷⁵ On *parāsu* in livestock contexts, see San Nicolò, “Viehwirtschaft III,” 136, and van Driel, “Sheep and Goats,” 245 (endnote 45).

⁷⁶ E.g., line 27, which states that cattle and birds are given (*nadnu*) to the Eanna for the sacrifices of the king.

⁷⁷ “Sheep and Goats,” 245 (endnote 45).

⁷⁸ For a different method of organizing animal intake from royal or other governmental officials, see da Riva, *Ebabbar*, 294ff.

(*ša rēš šarri*).⁷⁹ The office, and for that matter *sibtu* itself, occurs in a handful of texts from the Eanna archive, and a few more than that in the published Ebabbar material. San Nicolò, Bongenaar, Dandamaev, and da Riva assume that *sibtu* is a type of tax on a temple's herds of cattle and sheep and goats.⁸⁰ Yet the evidence, albeit scant, shows *sibtu* being both extracted from *and* added to temple herds.⁸¹ The latter is evident enough in TCL 12 123, where animals given *via* the *rab sibti* are counted as intake. GCCI 2 68 also makes this point explicitly.

GCCI 2 68
Uruk (Eanna)

19-X-20
Nabopolassar

obv.

1. *i-na* 91 UDU.NITÁ SÁ.DUG₄.ME
 2. Šá ^mDIN-su LÚ.<GAL> *sib-ti*
 3. *ina* ŠU^{II} ^{md}U.GUR-MU-DÙ
 4. A-ŠÚ Šá ^mna-d-na-a *iš-pu-ra*
 5. 86 UDU.NITÁ.ME *ina* [lib-bi] IGI-ir
 6. *u* 5 *ina* IGI ^{md}U.GUR-MU-DÙ
- lo.e
7. *ri-hi-u*
 8. ITI.AB UD.19.KAM
 9. MU.20.KAM
 10. ^{md}AG-A-PAP
- u.e.
11. LUGAL E.KI

Dougherty has an edition of the text in GCCI 2 p. 24. The reverse is not marked in the copy.

(1-7) Of the 91 sacrificial sheep and goats that Balāssu the *rab sibti* sent *via* Nergal-šuma-ibni/Nadnā, 86 sheep and goats are received and 5 are the balance (carried over) under the responsibility of Nergal-šuma-ibni.

⁷⁹ See Bongenaar, *Prosopography*, 138, Muhammad Dandamaev, “The Neo-Babylonian *rab sibti*,” in *Assyriologica et Semitica: Festschrift für Joachim Oelsner*, eds. Joachim Marzahn and Hans Neumann, AOAT 252 (Münster: Ugarit Verlag, 2000), 29, and San Nicolò, “Viehwirtschaft I,” 306.

⁸⁰ See San Nicolò, “Viehwirtschaft I,” 306, Bongenaar, *Prosopography*, 138, Dandamaev, “*rab sibti*,” 29, and da Riva, *Ebabbar*, 216.

⁸¹ Cf., Dandamaev, “*rab sibti*,” 31, “[t]he cattle and sheep delivered as tax were used in the same temples for sacrifices on behalf of the king.”

(8-11) The nineteenth day of month X (Tebētu), twentieth year of Nabopolassar, king of Babylon.

Moreover, the end of YOS 6 118, an inventory of cattle, reads in part (lines 19-23)

naphar 9 alpū šibtu ša UD.9.KAM ina libbi 4 puḥālū ana urī 5 alpū 3.MEŠ ina parās ša MU.15.KAM ina qāt mZērija aplišu ša Šamaš-kēšir ana Ebabbar šapru, “a total of 9 oxen, the *šibtu* of the ninth day—of which, 4 young males (were transferred) to the (*bīt*) *urī*, (and) 5 three-year-old oxen from the set-aside of the fifteenth year were sent to the Ebabbar [of Larsa] via Zērija/Šamaš-kēšir.” These texts make it unequivocal that *šibtu* animals were transferred to the temple.⁸² Moreover, if the distribution marked in YOS 6 118 can be applied to sheep and goats, it is also evident that the temple allocated *šibtu* animals in much the same way that it allocated animals from the external management. It remains unclear what to make of the fact that these animals are both taken from and given to the temple. If *šibtu* was indeed a sort of royal tax on animals, it was immediately distributed back to the temple from which it was taken. Perhaps this was more in the realm of ceremonial exchanges than that of real asset extractions.

With only a few texts as evidence it is perilous to characterize the royal offerings in anything but general terms. Most striking about TCL 12 123 is the apparent randomness of the deliveries, both in terms of the kind and number of animals transferred to the Eanna. Some years mention birds, while others do not (yet birds are not mentioned in the initial lines of the text). Some sections break down the livestock into categories, others do not. Some sections balance, while others do not. The number of animals that were delivered in any year varied widely. Moreover, the text does not describe the delivery of

⁸² See as well GCCI 1 192:1f. which marks the exchange of *šibtu*-goats for silver.

animals with consistency. For some years, the animals are just “given,” whereas in others they are given by named persons and/or a *rab sibti*. The final section of TCL 12 123 reveals that the animals came from many different persons, most of whom are designated as belonging to the royal administration. Since there is little contemporaneous information about the origin of these animals, it is difficult to conjecture why such deliveries to the temple varied in type, number, and circumstances of delivery from year to year. This question is vexing because we do not know why these members of the royal administration delivered animals to the temple for the royal offering: were the animals donations or were they collected as a type of compulsory tax? In either case, the random nature of delivery expressed in TCL 12 123 may reflect the particular demands of the rituals of that year, or perhaps the ability or inclination of the officials from whom *sibtu* was due to deliver animals.⁸³

The *bīt urī* also received animals as *irbu*, although the connection between the two is only found in two texts. One of these is YOS 17 321.⁸⁴ There is not enough background information to place this text in any sort of economic or administrative context, though it is interesting to note the role of the *šatammu* in the allotment of the animals.

⁸³ See as well my discussion here, Chapter Six, pp. 262ff.

⁸⁴ The other is Gehlken, *Uruk* I no. 18.

YOS 17 321
Uruk (Eanna)

06-XII-06
Nebuchadnezzar II

obv.

1. UDU.*pu-ha-di-e ir-bi* *[al]-na* É ú-re-e
 2. *par-su* ITI.ŠE UD.2.KAM [MU].6.KAM
 3. 4 UD.2.KAM
 4. 19 UD.3.KAM šá LÚ.ŠÀ.TAM *im-nu u a-na paq(!)-du* [*ip-qi-du(?)*]
 5. 12 UD.6.KAM šá ^mgi-mil-lu
 6. *ip-ru-us*
 7. PAP 35 UDU.*pu-ha-di-e*
- lo.e.
8. šá *ir-bi par-su*
- rev.
9. ITI.ŠE UD.6.KAM MU.6.KAM
 10. ^dAG-NÍG.DU-ŠEŠ LUGAL E.KI

(1-8) *irbu* lambs (which) were set aside for the *bīt urī*, the second day of month XII (Addaru), sixth year. 4 (lambs allotted) on day two; 19 on day three, which the *šatammu* counted and put on deposit (with a herdsman?). 12 on day six, which Gimillu set aside. A total of 35 *irbu* lambs were set aside.

(9-10) The sixth day of month XII (Addaru), sixth year of Nebuchadnezzar, king of Babylon.

Finally, for unknown reasons, perhaps religious purposes, the offering shepherd transferred some animals from his care to the *bīt urī*.⁸⁵ There is, however, no evidence that the *bīt urī* transferred animals to the offering shepherd. Moore Michigan Coll. 19 reports that a sheep that had died in the *bīt urī* was given to the offering shepherd.

In general, it seems evident that the intake of the *bīt urī* followed much the same patterns as the intake of the offering shepherd, although the scope of the *bīt urī* appears to have been much larger than that of the offering shepherd. Not only did the *bīt urī* deal with cattle, it also supplied livestock for purposes that were not sacrificial, which is not

⁸⁵ See YOS 7 8:20.

the case for the offering shepherd. The three commonest sources of animal intake for the offering shepherd appear to be the same for the *bīt urī*: the external management; the “offering for the king;” and *irbu* animals. However, a detailed analysis of the *bīt urī*’s intake must await further evidence.

IV. The Animal Outlays of the Offering Shepherd and the *bīt urī*

The evidence for the animal outlays of the internal management falls into three categories: account settlements or audits, of which there are two for the offering shepherd (no such evidence exists for the *bīt urī*); tabular sacrifice records, which formulaically detail the monthly apportioning of the animal outlays for the regular offerings (called *sattukku* and *guqqū*) of both the offering shepherd and the *bīt urī*; and administrative texts, which help to fill in details glossed over or left unexplained in texts from the first two categories. Almost all the evidence for the outlays of the *bīt urī* occurs in tandem with that of the offering shepherd.

For easy reference, the outlay section of YOS 7.8 (lines 13-28) is presented again. The reader is asked to refer to the full edition (pp. 137ff.) for a discussion of issues associated with this text:

13. *ina lib-bi* 5800 UDU.NITÁ.ME *ri-hi-it* SÁ.DUG₄ *u gu-uq-qu-ú šá ul-tu*
 14. UD.23.KAM šá ITI.GU₄ MU.15.KAM *a-di qí-it šá* ITI.GU₄ MU.1.KAM ^m*ku-raš* LUGAL
 KUR.KUR *par-su*
 15. 96 UDU.NITÁ.ME šá MU.15.KAM MU.16.KAM *u* MU.17.KAM *a-na* ^dIGI.DU
 lo.e.
 16. *ù dGAŠAN É.AN.NA a-na UBARA.KI šap-ru*
 17. 20 UDU.NITÁ.ME *ina* ITI.ŠE šá MU.15.KAM 11 *ina* ITI.ŠE šá MU.16.KAM
 18. PAP 31 UDU.NITÁ.ME *a-na bať-lu a-na* É.BABBAR.RA [šap-ru]
 rev.
 19. 61 UDU.NITÁ.ME 17 MÁŠ.GAL *a-na hi-it-bu* *ina* É.GU₄.MEŠ *u* UDU.NITÁ.ME
 20. 140 UDU.NITÁ.ME *a-na ú-ru-ú* 24 UDU.NITÁ.ME *ina* KÁ.ME *nu-uk-ku-su*
 21. 274 *par-rat a-na qa-bi-e na-ad-na* 2 MÁŠ.GAL *a-na* GIŠ.BANŠUR
 22. šá LÚ.ú-ra-šú šá UD.UNUG.KI
 23. PAP 6426 UDU.NITÁ.MEŠ 19 MÁŠ.GAL *ma-hi-ir*
 24. 56 UDU.NITÁ.MEŠ *a-na* SÁ.DUG₄ šá *ul-tu* UD.1.KAM šá ITI.SIG₄ MU.1,[KAM]
 25. ^m*ku-ra-áš* LUGAL KUR.KUR *ina pa-ni-šú am-ra*
 26. 334 *pag-ra-nu ma-hi-ir*
 27. PAP.PAP 6816 UDU.NITÁ.MEŠ 19 MÁŠ.GAL [ma-hi-ir]
 28. [ri]-e-*hi* 220 UDU.NITÁ.MEŠ *ina pa-ni* ^m*šu-[zu-bu]*

(13-14) From which, 5800 sheep and goats, the remainder of *sattukku* and *guqqû* offerings, which were set aside from the twenty-third day of month II, fifteenth year [of Nabonidus] until the end of month II, first year of Cyrus, king of lands.

(15-16) 96 sheep which were sent to Udannu in the fifteenth, sixteenth, and seventeenth years for Nergal and the Lady of Uruk.

(17-18) 20 sheep in month XII (Addaru) of the fifteenth year, 11 in month XII of the sixteenth year, a total of 31, were sent to the Ebabbar on account of a stoppage.

(19) 61 sheep and 17 goats (given) for *hitbu* in the cattle and sheep stables.

(20) 140 sheep (transferred) to the (*bīt*) *urâ*.

(20) 24 sheep were slaughtered at the gates.

(21) 274 young female sheep were given to the “fold.”

(21-22) 2 goats for the table of(?) the *urāšu* workers of Larsa.

(23) A total of 6426 sheep and 19 goats were received (from him).

(24-25) 56 sheep for *sattukku* offerings since the first day of month III (Simanu) the first year of Cyrus, king of lands, were inspected as under his responsibility.

(26) 334 carcasses were received (from him).

(27) A grand total of 6816 sheep and 19 goats were received (from him).

(28) A remainder of 220 sheep is under the responsibility of Šūzubu.

This text makes clear that the offering shepherd used the vast majority of animal outlays for *sattukku* and *guqqû* offerings. He used most of the remaining outlays for other types

of offerings, with the exception of animals that were given to the *bit urî* (line 20), which may have been used for sacrifice as well, and animals that were redistributed to the external management (line 21). One finds this same pattern in YOS 7 74, a month-to-month audit of the outlays (i.e., credits) of an offering shepherd from the period Cyrus 01-XI-06 to Cyrus [01]-III-08. A full edition follows.

YOS 7 74
Uruk (Eanna)

07-III-08
Cyrus

obv.

1. UDU.NITÁ.ME šá *ul-tu* UD.1.KAM šá ITI.ZÍZ MU.[6.KAM *mku-raš* LUGAL E.KI]
2. LUGAL KUR.KUR *ina ŠU*^{II} LÚ.SIPA SÁ.DUG₄ *a-na* SÁ.[DUG₄ *par-su*]
3. 97 UDU.NITÁ.ME *a-na* SÁ.DUG₄ *par-su* [ITI.ZÍZ MU.6.KAM *mku*
raš]
4. 80 UDU.ME *a-na* SÁ.DUG₄ 20 *a-na bat-lu a[-na* É.BABBAR.RA ITI.ŠE]
5. 134 UDU.ME *a-na* SÁ.DUG₄ 8 *a-na URU.ú-[dan-nu* ITI.ŠE.DI]RI
6. 103 UDU.ME *a-na* SÁ.DUG₄ [ITI.BÁR] MU.7.KAM
7. 77 UDU.ME *a-na* SÁ.DUG₄ [ITI.GU₄]
8. 125 UDU.ME *a-na* SÁ.DUG₄ [ITI.SIG₄]
9. 109 UDU.ME *a-na* SÁ.DUG₄ [x x] 'x x' [ITI.ŠU]
10. 93 UDU.ME *a-na* SÁ.DUG₄ 16 *pag-ru* [ITI.NE]
11. 107 UDU.ME *a-na* SÁ.DUG₄ *ina lib-[bi 1]* šu-kut-tum 25 *a-na bat(!)-[lu... x+]* 8
pag-ru ITI.KIN
12. 126 UDU.ME *a-na* SÁ.DUG₄ *ina li[b-bi 1 šu]-kut-tum* 8 [pag-ru] ITI.DU₆
13. 100 UDU.ME *a-na* SÁ.DUG₄ [x+] 10 *pag-ra* ITI.APIN
14. 111 UDU.ME *a-na* [SÁ.DUG₄] 15 *pag-ra* ITI.GAN
15. 127 UDU.ME *a-na* SÁ.DUG₄ 4? [a]-[na] URU.ú-dan-nu 15 *pag-ra* ITI.AB!
- lo.e.
16. 63 UDU.ME *a-na* SÁ.DUG₄ 3 *pag-ra* ITI.ZÍZ
- rev.
17. 139 UDU.ME *a-na* SÁ.DUG₄ 4 *a-na URU.ú-dan-nu* 7 *pag-ru* ITI.ŠE
18. 105 UDU.ME *a-na* SÁ.DUG₄ 3 *pag-ru* ITI.BÁR MU.8.KAM
19. 105 UDU.ME *a-na* SÁ.DUG₄ 8 *pag-ru* ITI.GU₄
20. PAP 1808 UDU.ME *a-na* SÁ.DUG₄ 45 *a-na bat-lu a-na* É.BABBAR.RA
21. 16 *a-na URU ú-dan-nu* 2 *ina UGU šu-kut-tum ép-šú*
22. 162 *pag-ra* IGI-ir
23. 57 UDU.BÁR.GAL šá *a-na* É ú-ru-ú *id-di-nu*
24. 20 UDU.*ka-lum* šá *a-na* UDU.SILA₄.ME *ina pa-ra-su* šá ITI.KAN UD.20.KAM
MU.8.KAM *id-di-nu*
25. 2 U₈.ME 1 *ka-lum* 20 *par-rat* PAP 23 IGI-ir *a-na qa-bi-e a-na* LÚ.NA.GADA.MEŠ
[nadnu?]
26. PAP-*ma* 21[33] UDU.NITÁ.ME *ul-tu* UD.1.KAM šá ITI.ZÍZ MU.6.KAM *a-di*
UD.[1.KAM]
27. šá ITI.SIG₄ MU.8.KAM *mku-ra-áš* LUGAL TIN.TIR.KI LUGAL KUR.KUR *mšu-zu-bu*
LÚ.SIPA [SÁ.DUG₄]
28. ù *mdUD-ŠEŠ-MU* LÚ.SIPA KÁ *maḥ-ru*
29. *ri-e-ḥi* 128 UDU.ME *ina SÁ.DUG₄* šá *ul-tu* UD.1.KAM šá ITI.SIG₄
30. MU.8.KAM *ina pa-ni-šú-nu* ITI.SIG₄ UD.7.KAM MU.8.KAM
31. *mku-ra-áš* LUGAL TIN.TIR.KI LUGAL KUR.KUR

This text summarizes the various sacrificial disbursals in lines 20-22; lines 23-25 summarize transfers that are not included in the month-to-month entries listed in lines 3-19, and are not, it seems, associated with any type of offerings.

Line 11 *šukuttu* occurs only in this text and in a few tabular sacrifice records (see Ellen Robbins, "Tabular Sacrifice Records and the Cultic Calendar of Uruk," *JCS* 48 (1996): 75ff.); it is evidently associated with the restoration of divine jewelry. The meaning of *ina muḥhi šukutti epēšu* in line 21 is unclear.

Line 24 This line is paralleled by YOS 7 143:7 (see here, p. 147ff.) 2 *kalūmū bābtī* 20 *puhādū ana parāsu!* *ša Simanu* UD.20.KAM *šullumu*, "An installment of two male lambs (for) the 20 lambs were delivered (or: they delivered) for the setting-aside of the twentieth day of month III (Simanu)." It is interesting that each of these texts records an allotment of 20 animals to be given on the twentieth day of a month, although the purpose of this allotment is not made clear. Also, the year given in this line must be in error; the text dates to month III of Cyrus' eighth year, which is six months before the date given in this line.

Line 20 The numbers in the text actually total 1,801.

(1-2) Sheep and goats that were set aside by the offering shepherd for *sattukku* offerings since the first day of month XI (Šabatū) [sixth year of Cyrus, king of Babylon] king of lands.

(3) 97 sheep set aside for offerings, [month XI (Šabatū), year six of Cyrus]

(4) 80 sheep for offerings, 20 for the stoppage [at the Ebabbar month XII (Addaru)]

(5) 134 sheep for offerings, 8 to U[dannu], [intercalary month XII]

(6) 103 sheep for offerings, [month I (Nisannu)], year 7

(7) 77 sheep for offerings, [month II (Ajaru)]

(8) 125 sheep for offerings, [month III (Simanu)]

(9) 109 sheep for offerings, [x x] 'x x' [month IV (Du'ūzu)]

(10) 93 sheep for offerings, 16 carcasses, [month V (Abu)]

(11) 107 sheep for offerings, of which 1 šukuttum, 25 for the [stoppage], (x+) 8 carcasses month VI (Uūlul)

(12) 126 sheep for offerings, of which 1 šukuttum, 8 carcasses, month VII (Tašrītu)

(13) 100 sheep for offerings, (x+)10 carcasses, month VIII (Arahsamna)

(14) 111 sheep for offerings, 15 carcasses, month IX (Kislīmu)

(15) 127 sheep for offerings, 4(?) to Udannu, 15 carcasses, month X (Tebētu)

(16) 63 sheep for offerings, 3 carcasses, month XI (Šabatū)

(17) 139 sheep for offerings, 4 to Udannu, 7 carcasses, month XII (Addaru)

(18) 105 sheep for offerings, 3 carcasses, month I (Nisannu), eighth year

(19) 105 sheep for offerings, 8 carcasses, month II (Ajaru)

(20-22) Total(s) 1808 (*sic*) sheep for *sattukku* offerings, 45 for the stoppage at the Ebabbar, 16 to Udannu, 2 done for(?) the šukuttum, and 162 carcasses were received (from him).

(23-25) 57 young male sheep which he gave to the *bīt urī*, 20 male lambs which he gave for the lambs of the allotment of the twentieth day of month IX (Kislīmu), year eight (*sic*), 2 ewes, 1 male lamb, (and) 20 female lambs, a total of 23 were received (from him, and) [given] to the herdsmen for the fold.

(26-28) A grand total of 2133 sheep have been received from Šūzubu the offering shepherd and Šamaš-aha-iddin the shepherd of the gate, from the first day of month XI (Šabatū), year six until the [first day of] month III (Simanu), year eight, Cyrus, king of Babylon, king of lands.

(29-30) A remainder of 128 sheep, (the balance) from offerings that (have occurred) since the first of month III (Simanu), year eight is under their responsibility.

(30-31) The seventh day of month III (Simanu), eighth year of Cyrus, king of Babylon, king of lands.

In both YOS 7 8 and YOS 7 74 the offering shepherd delivers the vast majority of animals for *sattukku* and *guqqû* offerings, which account for ninety percent of outlays in YOS 7 8, and eighty-five percent in YOS 7 74. The outlay of animals from the offering shepherd and *bīt urî* for the regular offerings is the subject of a series of around forty texts that E. Robbins has collected and studied.⁸⁶ These small ledger texts, which she calls “tabular sacrifice records,” record the distribution of sheep and goats from the internal management for regular offerings (*sattukku* and *guqqû*). They also at times note secondary offerings and other disbursements. Each begins with a superscript, which in its basic form reads *immerū ša ultu bīt urî u lapani/pani rē²i sattukki ana sattukku u guqqû ša MN MU.x.KAM RN parsū*, “sheep and goats which were set aside from the *bīt urî* and offering shepherd for *sattukku* and *guqqû* offerings of MN, year x of RN.” Beneath the superscript, under its horizontal ruling, are between three and five columns, ruled off vertically. The rightmost column is a consecutive list of days of the month, to some of which are appended short notes on secondary sacrifices or other allotments. The remaining two to four columns list numbers per day. In a few texts these columns are captioned. The captioning of the shortest (two column) text reads *ú-ru-ú / LÚ.SIPA*

⁸⁶ Robbins, “Cultic Calendar.”

SÁ.DUG₄, “*bīt urî* / offering shepherd.” The longest reads *ú-ru-ú* / *pag-ri* / SIPA SÁ.DUG₄ / *pag-ri*, “*bīt urî*, carcass, offering shepherd, carcass.” Nine sheep constituted the basic daily offering, five from the *bīt urî* and four from the offering shepherd. Variations to this basic pattern exist, but one constant in those variations is that sheep from the *bīt urî* always outnumber those from the offering shepherd.⁸⁷ We shall discuss the carcasses below.

Robbins maintains that the tabular sacrifice records “represent a middle stage in record-keeping, monthly compilations of daily allocations that then served as source-material for audit accounts taking in longer periods.”⁸⁸ The lack of subtotals or summary information in these texts seems to me to make it unlikely that they were used for counting outlays. Yet at the same time there are only a few (published) texts that mark day-to-day or week-to-week outlays from the offering shepherd. Three texts, YOS 17 69, YOS 17 345 (here, pp. 198f.), and UCP 9/1, 33, mark the receipt of animals from the offering shepherd around the time of the offerings. One text, Sack, *Cuneiform Documents* 38, marks the receipt of animals sometime before then. Two other texts mark the receipt of animals from the “shepherd of the sacrificial sheep.” One of these is YOS 17 73.

⁸⁷ For the variations of the superscript, see Robbins, “Cultic Calendar,” 64; for the variations of the captioning of the columns, see *ibid.* 65; for variations of the basic pattern of sheep disbursal, see *ibid.* 66.

⁸⁸ Robbins, “Cultic Calendar,” 62.

YOS 17 73
Uruk (Eanna)

11-IV-23
Nebuchadnezzar II

obv.

1. 21 UDU.NITÁ.「MEŠ」*a-na*
 2. SÁ.DUG₄ šá UD.10.KAM UD.11.「KAM」
 3. UD.12.KAM šá ITI.ŠU
 4. ^mMU-ŠEŠ LÚ.SIPA šá UDU.SÁ.DUG₄
 5. IGI-*ir*
- rev.
6. ITI.ŠU UD.11.KAM
 7. MU.23.KAM
 8. ^dAG-NÍG.DU-ŠEŠ
 9. LUGAL TIN.TIR.KI

(1-5) 21 sheep for the *sattukku* offerings of the tenth, eleventh, and twelfth days of month IV (Du'ūzu) have been received from Šuma-ušur the shepherd of the sacrificial sheep.

(6-9) Eleventh day of month IV (Du'ūzu), twenty-third year of Nebuchadnezzar, king of Babylon.

Certainly this same Šuma-ušur appears in GCCI 1 246,⁸⁹ which is dated seven days before YOS 17 73.

⁸⁹ Interestingly, he may also appear in a letter, YOS 3 99. A Šuma-ušur is the sender, and in it he states (lines 5-8): *immeru ana ginê maṭû ša 1-en arbi immeru bēlu lišpur(u)*, “sheep and goats (text sing.) for the offerings are lacking. The lords should send sheep (text sing.) for one month’s (worth of offerings).”

GCCI 1 246

Uruk (Eanna)

04-IV-23

Nebuchadnezzar II

- obv.
1. 7! UDU *gi-[nu-ú]*
 2. 8 *a-na* KUD-*[as]* [x]
 3. PAP 15 UDU.NITÁ *gi-nu-[ú]*
 4. *u gu-uq-qu-ú*
 5. ŠÁ UD.4.KAM
 6. 5 *ina gi-ni-e* ŠÁ UD.5.KAM
- lo.e.
7. PAP.PAP 20 UDU.NITÁ
- rev.
8. *ina* UDU.NITÁ ŠA *ina* IGI ^mMU-ŠEŠ
 9. *a-na* KUD-*as* ^mMU-ŠEŠ IGI-*ir*
 10. ITI.ŠU UD.4.KAM MU.23.KAM
 11. ^dAG-NÍG.DU-ŠEŠ
 12. LUGAL TIN.TIR.KI

(1-9) 7 sacrificial sheep and goats, 8 for setting aside [x], a total of 15 *ginū* and *guqqū* sheep and goats of the fourth day, (and) 5 from the *ginū* offerings of the fifth day, a grand total of 20 sheep and goats, from the sheep and goats under the responsibility of Šuma-uṣur, have been received from Šuma-uṣur for setting aside.

(10-12) The fourth day of month IV (Du^uzu), twenty-third year of Nebuchadnezzar king of Babylon.

The offerings occur on the same day that the text was written, which reveals that the shepherd of the sacrificial sheep and goats was involved in the process at least at the time of the sacrifices. As the shepherds of the sacrificial sheep were connected to the offering shepherd,⁹⁰ it is possible that they acted as liaisons between the offering shepherd and the places where the sacrifices occurred within the temple precinct. As the offering shepherd is not mentioned in either of these texts, it is also possible that they dealt with those sheep and goats that were collected from the external management and given directly for

⁹⁰ See here, pp. 131f.

offerings, as was discussed above.⁹¹ If this is the case, they still were part of the offering shepherd's staff, as only the offering shepherd and the *bīt urī* are found in the tabular sacrifice records as the origin of sacrificial animals.

These few exceptions notwithstanding, at this time we do not have daily or weekly notations for the transfer of livestock from the offering shepherd to the temple. This is particularly interesting given that one might expect this type of recurring activity would have lent itself to a regular type of documentation. According to the tabular sacrifice records, the offering shepherd would have been expected to ready and send off an average of 120 sheep (four sheep daily x 30 days) monthly. The *bīt urī* would have turned out 150 in an average month (5 sheep daily x 30 days). It is possible that the transfer of four sheep per day from the offering shepherd (and five from the *bīt urī*) did not require documentation, inasmuch it constituted the regular task of the offering shepherd *vis-à-vis sattukku* offerings. Yet this seems unlikely, and, as demonstrated by the outlay audit YOS 7 74, the total number of sheep used in any given month fluctuated. In the audit YOS 7 74 the number of *sattukku* sheep sent out by the offering shepherd per month ranges between 139 (line 17) and 63 (line 16), the average is 106, which is well below the expected outlay (although it is possible that more than one offering shepherd was active at this time).⁹² YOS 7 8 reports that the offering shepherd sent 5800 sheep out for *sattukku* offerings between Nabonidus 23-II-15 and Cyrus 30-II-01, yielding an

⁹¹ See here, p. 152.

⁹² The total number of *sattukku* sheep for the year given in the text is 1808, but the total I arrive at is 1801. The difference for the average is negligible.

average of 157 per month, which is well above the expected outlay.⁹³ Some days in the tabular sacrifice records saw the sacrifice of between twenty and ninety sheep, while at times the offering shepherd did not send out any, leaving the *bīt urî* to make up the difference.⁹⁴ It seems that the central administration would have used some type of regular documentation to account for daily or weekly transfers of animals from the internal management, but such documentation at this point is not known from available evidence. Given that, it is possible that daily or weekly transactions were interim records that were destroyed or otherwise disposed of when final tabulations (such as audits) were made.

IV.A. Secondary Transfers

The two audit texts YOS 7 8 and YOS 7 74 agree with the tabular sacrifice records that the offering shepherd allocated animals to a series of secondary uses and locations. Those that occur most frequently are: *ana baṭli ana Ebabbar šapru*, “sent to the Ebabbar on account of the stoppage;” *ana Udannu*, or in the fuller form, *ana Nergal u Bēlet Eanna ana Udannu* (UBARA.KI) *šapru* “sent to Udannu for Nergal and the Lady of the Eanna”; and those sacrificed at the gates (*ina bābāni nukkusu*).⁹⁵ Other types of outlays found in the audit texts are the *hitbu*, the *šukuttum* and the unique *ana paššūri ša* (LÚ.)*urāšī ša Larsa*, “to the table of the *urāšu* worker(s) of Larsa.” Robbins lists other types of unique or rare offerings and other transfers found in the tabular sacrifice

⁹³ I.e., eleven months in year 15 of Nabonidus (III-XIIb), twelve months in year 16, twelve months in year 17 (= Cyrus acc. year), and two months in Cyrus year 1.

⁹⁴ See Robbins, “Cultic Calendar,” 66.

⁹⁵ Interestingly, this type of secondary transfer also occurs in YOS 7 143:4.

records.⁹⁶ The number of animals sent to these secondary locations, or used for secondary purposes, is never large.

References to these secondary offerings are limited both in number and in context. When they do occur in contexts other than tabular sacrifice or audit texts, they do not impart information on either the offering shepherd or the *bīt urī*, and are more relevant to the study of the central administration. Three examples of this are the letters YOS 3 191 (about sacrifices to Nergal), YOS 3 92 (about sending an ox to Larsa) and the administrative receipt YOS 17 90.⁹⁷ The only administrative receipt of which I am aware that deals with secondary offerings and either the offering shepherd or *bīt urī* is YOS 17 345, an edition of which follows.

⁹⁶ Robbins, "Cultic Calendar," 77. Texts published in Paul-Alain Beaulieu, *The Pantheon of Uruk during the Neo-Babylonian Period*, Cuneiform Monographs, 23 (Leiden: Brill; Boston: Styx, 2003), 41-96 indicate that transfers of animals for secondary sacrifices were much wider in scope than was previously known. There is nothing, however, in these new texts to change the schema presented here.

⁹⁷ For YOS 17 90 see Paul-Alain Beaulieu, "UBARA (EZENxKASKAL)^{ki} = Udannu," *Acta Sumerologica* 13 (1991): 99.

YOS 17 345
Uruk (Eanna)

03-XII-12
Nebuchadnezzar II

obv.

1. *ul-tu* UD.3.KAM šá ITI.ŠE
2. *a-di* UD.6.KAM *u₄-mu*
3. 2 UDU.NITÁ *a-na* É.AN.NA
4. *u* É ^dAMAR.UD
5. [x] *a-na* ^dNUSKU
6. 1 *a-na* ^dur-dim.MEŠ
- lo.e.
7. *u* ^dkak-kab-ti
8. PAP 10 UDU.NITÁ.MEŠ *gi-né-e*
9. ^mTUKUL-*ti*-^dAMAR.UD A ^mNÍG.DU
- rev.
10. LÚ.SIPA *gi-né-e*
11. IGI-*ir* ITI.ŠE UD.3.KAM
12. MU.12.KAM ^dAG-NÍG.DU-ŠEŠ
13. LUGAL TIN.TIR.KI

An edition of this text now appears in Paul-Alain Beaulieu, *The Pantheon of Uruk during the Neo-Babylonian Period*, Cuneiform Monographs, 23 (Leiden: Brill; Boston: Styx, 2003), 93.

Line 8. It is unclear how the total of 10 sheep and goats is arrived at. Although the number of sheep in line 5 is broken, the total of the legible animals is 12 (2 in line 3, and 1 in line 6, multiplied by 4 days).

(1-10) From the third of month XII (Addaru) until the sixth, daily, 2 sheep and goats to the Eanna and to the “temple of Marduk,” [x] for Nusku, and 1 for the Urdimmus and Kakkabti, a total of 10 sacrificial sheep and goats, have been received from Tukulti-Marduk/Kudurru the offering shepherd.

(12-13) The third day of month XII (Addaru), twelfth year of Nebuchadnezzar, king of Babylon.

Although this text is unique inasmuch as it mentions unusual locations and gods as the recipients of the sacrifices, it is in fact similar in form and function to those texts that record the receipt of animals by the offering shepherd and the shepherd of sacrificial sheep for imminent offerings.⁹⁸ Unfortunately there is not enough information to understand the offering shepherd’s function in these sacrifices. For example, did the

⁹⁸ See here, pp. 192ff.

offering shepherd constitute the primary supplier of animals to particular secondary sacrifices, or did he make up the difference in animals when local resources were not sufficient? The latter seems to be the case when he sent animals to the Ebabbar of Larsa *ana batli* “on account of a stoppage.”

IV.B. Carcasses

Entries for the transfer of sheep carcasses from the offering shepherd appear both in audit texts and in almost every tabular sacrifice text. Moreover, the transfer of sheep and goat carcasses is the subject of a homogeneous group of administrative receipts. Again, this section is out of necessity only concerned with the offering shepherd. Although tabular sacrifice records specifically contemplate carcasses from the *bīt urî*, only two texts of which I am aware may document this transfer.⁹⁹

The carcasses that appear in these texts are of sheep and goats that died of natural causes while under the care of the temple, not of those that were slaughtered in the rituals.¹⁰⁰ There is no evidence in Eanna texts that carcasses were put in salt for non-prebendal consumption, which is amply documented in the archive of the Ebabbar temple of Sippar.¹⁰¹ The appearance of carcasses in the tabular sacrifice records compels us to believe that they played some part in the *sattukku* ritual at the Eanna, but what part that

⁹⁹ AnOr 8 34 and UCP 9/1, 52, the latter does not mention the *bīt urî*, but does name Bibēa, who is discussed here, p. 175 note 68.

¹⁰⁰ See Robbins, “Cultic Calendar,” 68, San Nicolò, “Viehwirtschaft IV,” 356, and van Driel, “Sheep and Goats,” 245 (endnote 45).

¹⁰¹ Bongenaar, *Prosopography*, 63f.

may have been is not known, and this admittedly appears unusual. We also know that some carcasses were sold,¹⁰² and some were given in lieu of rations.¹⁰³

Tabular sacrifice records make it unequivocal that the temple received carcasses of sacrificial animals from the offering shepherd, and in YOS 7 8 and YOS 7 74 the offering shepherd is credited for carcasses from the animals put at his disposal.¹⁰⁴ Transfers of carcasses from the offering shepherd are also recorded in about thirty administrative receipts, most of which follow a similar pattern.¹⁰⁵ For example, there is GCCI 2 183:

GCCI 2 183 15-VII-03
Uruk (Eanna) (Nebuchadnezzar II)

obv.

1. 5 *pag-ra-nu*
 2. 「šá」 UDU.BAR.GAL.ME
 3. ^mNÍG.DU LÚ.SIPA SÁ.DUG₄
 4. IGI-*ir*
- rev.
5. ITI.DU₆ UD.15.KAM
 6. MU.3.KAM

(1-4) 5 carcasses of *parru* male sheep have been received from Kudurru the offering shepherd.

(5-6) Fifteenth day of month VII (Tašrītu), third year.

Another one of these texts, GCCI 1 50, reveals more information.

¹⁰² UCP 9/1, 40.

¹⁰³ See, for example, AnOr 8 34 and here, p. 161f. note 51.

¹⁰⁴ For the Ebabbar of Sippar, see Bongenaar, *Prosopography*, 64.

¹⁰⁵ These texts are (in addition to those discussed in detail in the following section): GCCI 1 11, 121, 144, 224, and 203, GCCI 2 289, Gehlen, *Uruk I* nos. 31 – 35, Sack, *Cuneiform Documents* 31 and 109, UCP 9/1, 18, 36, and 40 – 42, VAS 20 31, YOS 17 69, 93 – 97, 100, 101(?), 102, and 342.

GCCI 1 50
Uruk (Eanna)

09-VII-23(?)
Nebuchadnezzar II

- obv.
1. 「1! *pagl-ra ina* UDU.NITÁ
 2. šá *ina* IGI-šú
 3. ^mTUKUL-*ti*-^dAMAR.UD
 4. LÚ.SIPA SÁ.DUG₄ IGI-*ir*
- rev.
5. ITI.DU₆ UD.9.KAM
 6. [MU].「23?」.KAM
 7. ^dAG-NÍG.DU¹-ŠEŠ
 8. LUGAL 「TIN.TIR」.KI

(1-4) One carcass, from the sheep and goats that are under his responsibility, has been received from Tukulti-Marduk, the offering shepherd.

(5-8) The ninth day of month VII (Tašrītu), twenty-third (?) year of Nebuchadnezzar, king of Babylon.

That the offering shepherd had to account for those dead sheep and goats under his responsibility is not surprising. Unlike members of the external management, the offering shepherd was accountable for, and was expected to transfer to the temple (either dead or alive), every animal that passed through his supervision. In some cases, animals that died elsewhere were processed through the offering shepherd. In Moore Michigan Coll. 19 a sheep that died in the *bīt urī* was received from the offering shepherd,¹⁰⁶ and YOS 17 102 mentions sheep that died at the *bīt karī*, the “storehouse,” which were also received from the offering shepherd. A few texts mention that sheep that died “in the pasture” (ša [*ina*] *tāmirti mītū*) were processed through the same channel.¹⁰⁷ Moreover, in GCCI 1 121 one carcass along with three diseased sheep was received from the

¹⁰⁶ Although note that some tabular sacrifice records have an entry for carcasses from the *bīt urī* (see here, pp. 191f.).

¹⁰⁷ YOS 17 342, and Sack, *Cuneiform Documents* 31.

offering shepherd, and GCCI 2 171 informs us that the skins of sacrificial animals were received from the offering shepherd as well. One must assume that this latter transaction was rare, as skins are not mentioned in audit texts.¹⁰⁸

IV.C. Distribution

The two audit texts specify two types of outlay of animals for non-sacrificial purposes. The first is a transfer from the offering shepherd to the *bīt urī*,¹⁰⁹ and the second is given in YOS 7 8 as *ana qabē nadna* “given to the fold.” In YOS 7 74 this is expanded to *ana qabē ana nāqidī [nadna]*. The first transfer, to the best of my knowledge, is noted only in these audit texts and nothing can be made of it except to note that this transfer seems only to go one way, from the offering shepherd to the *bīt urī*, and not *vice versa*. The second transfer is documented in other texts, and is important in that it primarily deals with female sheep.

The expression *ana qabē ana nāqidī*, it is generally agreed, is a shortened form of *ana qabutti ina pan [PN] nāqidī*.¹¹⁰ As I argue elsewhere, Babylonian *qabuttu* has the same two nuances as English *fold*, meaning both the enclosure that holds a herd and the herd itself.¹¹¹ The phrase is used to express the relationship between the external

¹⁰⁸ See van Driel, “Sheep and Goats,” 241.

¹⁰⁹ YOS 7 8:20 and YOS 7 74:23.

¹¹⁰ See San Nicolò, “Viehwirtschaft III,” 144.

¹¹¹ See here, Chapter Three, pp. 42f.

management and the temple; temple animals given to the *qabuttu* (*qabû*) are leased out by the temple to the external management on a share-breeding basis.

The two entries in these audits, then, indicate in quite abbreviated language that these female sheep were distributed to the external management. These are almost certainly sheep that the offering shepherd collected as *irbu* income.¹¹² In YOS 7 8, most of the 274 female lambs (*parrātu*) assigned to the fold in YOS 7 8:21 must have come from the 261 *irbu* sheep (UDU.NITÁ) entered as income in line 10. YOS 7 74 does not identify the source of the mostly female sheep let out to the herdsman, but the fact that it describes the animals as received and distributed—that is, not as part of the sacrificial system, but as something that passed through the offering shepherd's hands—coupled with the fact that 20 of the 21 animals are female, strongly suggests that this is *irbu* income. The lack of its identification as *irbu* is not surprising, as YOS 7 74 does not deal with intake.

V. Summary and Conclusions

The evidence presented here allows for a fairly complete understanding of the internal management of sacrificial sheep and goats at the Eanna of Uruk. Almost every text associated with the internal management can be placed in its proper context, and the transactions it portrays can by and large be understood. Moreover, this complete picture

¹¹² See here, pp. 170f.

helps to clarify issues arising from other aspects of livestock management at the Eanna of Uruk.

The internal management consisted of two branches, the offering shepherd and the *bīt urî*. The main task of the offering shepherd was to prepare sheep (and a few goats) for ritual slaughter. Although we do not know what that preparation consisted of, evidence suggests that it may have included milk-feeding lambs. The offering shepherd had a staff, including the shepherds of the sacrificial sheep, and at times more than one offering shepherd was active. The *bīt urî* as such was not an actual corporate wing of the administration, and appears to be a term used to reference the location of a group of related offices and departments. Even with this understanding, it remains elusive. The evidence suggests that its main task was stock-feeding in stables.

The main supplier of livestock to the Eanna's internal management was the Eanna's external management. An audit of the offering shepherd (YOS 7 8) reveals that the external management supplied over three-fourths of all animals to the internal management. YOS 7 143 reveals that the majority of animals taken from the external management went to the internal. The intake from the external management to the offering shepherd (information on the *bīt urî* is simply not sufficient) consisted overwhelmingly, if not exclusively, of male sheep. Exceptionally, members of the external management were credited for barren ewes that were extracted for food rations; in fact, this is the only unequivocally non-prebendal consumption of sheep meat at the Eanna of which I am aware. The offering shepherd did receive female lambs and sheep as *irbu* intake (and perhaps from the royal offerings as well), but the evidence is

unambiguous that he redistributed these animals back to the external management. All of this serves to underscore the notion that the offering shepherd and his staff were not shepherds in the traditional or professional sense; they did not breed animals.

Moreover, the evidence makes clear that the offering shepherd received animals from the external management in small numbers at various times in the year, not in bulk at one or two times. This accords with delivery texts from the external management. We know, for example, that the offering shepherd kept a one-to-three-month supply of animals on hand at any given time. His turnover was *de facto* complete and rapid, which supports the notion that the Eanna's system of collection and allotment was always operative. This is quite unlike, say, the administrative system for the collection of barley dues, which functioned only at particular times of the year. Moreover, we can infer that the offering shepherd had to expend his animals before they reached a certain age, which may explain why he transferred some of his animals to the *bīt urī* but there was no reciprocal exchange back from the *bīt urī* to the offering shepherd.

Of the remaining two sources of intake, the royal offerings and *irbu*, there is more information about the latter, although it still remains murky. The origin of *irbu* animals is unclear, but the evidence is unambiguous that ewes and she-goats constituted the vast majority of animals collected as *irbu*, and these animals were distributed to members of the external management. The need for reallocation is clear, as female animals were much too valuable to sacrifice, but two questions remain. Why did *irbu* animals keep that designation as they made their way through the Eanna's livestock managements? In other words, why is a ewe a ewe, and an *irbu* ewe an *irbu* ewe? Second, why were *irbu*

sheep and goats collected and reallocated by the offering shepherd instead of (or in addition to?) the central administration? These questions await further evidence.

Around ninety percent of all the animals collected by the offering shepherd went for the daily offerings, called *sattukku*, and for another set of offerings called *guqqû*. This transfer of animals is the subject of a series of texts that record the monthly disbursals of animals (and, at times, carcasses) from the offering shepherd and the *bīt urî*, called tabular sacrifice records. The day-to-day transfer of live animals is not well documented by other types of texts, although that for carcasses is. The average number of sheep per month expected from the offering shepherd was around 120 (four per day) and 150 (five per day) from the *bīt urî*. Interestingly, yearly audits reveal that the actual monthly average from one offering shepherd was 157 from Nabonidus month II year 15 to Cyrus month II year 1, and 106 from Cyrus month II year 6 to Cyrus month II year 8. Yet one must use these monthly averages with caution. Some festivals saw the sacrifice of twenty to ninety sheep in one day. I assume that the regular offering encompassed any special set of offerings on behalf of the king, as I am unable to find a special set of offerings designated as such to correspond to the animal income of that name. The offering shepherd also transferred animals to a series of secondary locations and uses, yet it is unclear whether he was the primary supplier of such offerings, or whether the temple used him to make up the difference when the local stock ran low. Finally, the temple used animals that died while in the custody of the offering shepherd, or that died elsewhere and were transferred through the offering shepherd, in the *sattukku* offerings. This stands in sharp contrast with the Ebabbar of Sippar, where the offering shepherd

preserved animals in salt for non-prebendal consumption. There is also some evidence that carcasses were sold.

The evidence is such that the overall operations of the internal management can be reconstructed with some success, although an understanding of some important details awaits new evidence. There are many indications that the internal management was a text-heavy operation. The offering shepherd and his subordinates had to account for every animal in their possession at all times. In addition to texts that marked the movement of animals from one person or bureau to another, the Eanna also documented the death and disease of animals that remained in the possession of the offering shepherd. This is a striking contrast to the documentation for the external management. The herdsmen were responsible only for the delivery of a determined number of animals per year. How the herdsman produced that number, or what happened to his animals in the meantime, was not the concern of the Eanna.

The textual record for the internal management is neither uniform in time nor consistent in subject. Every text of which I am aware that deals specifically with the transfer of carcasses dates to the reign of Nebuchadnezzar II, whereas all the tabular sacrifice records date to the reign of Nabonidus and the early Achaemenids. Only a few texts dealing with sheep and goats mention the *bīt urī* without the offering shepherd, yet the bureaucracy of the *bīt urī* was certainly as complex as the bureaucracy of the offering shepherd was. As more texts come to light, future research must try fit them into the schema of the internal livestock management system as a whole; this should help determine whether a lack of documentation during a specific time, or about a particular

subject, is due to a change in practice, or whether the texts were simply missed by a digger's shovel.

CHAPTER FIVE

THE BOW OBLIGATION

I. Introduction

A significant number of texts from the Eanna archive link the herdsmen and herd supervisors to the fulfillment of a particular royal service obligation, which is commonly called the “bow service.” In fact, with the exception of the ambiguously labeled “oblates,” the herdsmen are the only Eanna dependents associated with the bow obligation. This is emphasized by the stock phrase LÚ.PAN.ME(Š) ša LÚ.SIPA.ME(Š), which is literally translated “the bowmen of the shepherds.” In this chapter I shall discuss the evidence for the bow obligation, but it must be stated at the outset that the evidence is fragmentary and disjointed, many texts are broken or incomprehensible at crucial parts, and the skeletal reconstruction does not allow us to connect points that beg for cohesion. At times I also draw on texts from the Ebabbar archive for comparison, but what is published from there is only a small part of what appears to be a wealth of information in texts that remain unpublished in the British Museum.

After a brief discussion of the various ways of referring to the bow obligation in both Eanna and Ebabbar texts, I discuss the bowmen’s organization. The majority of information relates to the mustering of the bowmen through their local hierarchies. After this, I discuss the utilization of the herdsmen as bowmen, but, again, we are dealing with

evidence that is very disjointed. In fact, evidence for the bowmen after they leave the Eanna is so scanty that it is possible that they then entered into a different jurisdictional sphere altogether. In the end I use the available evidence to discuss the relationship between the Eanna and the royal administration at Babylon.

II. Orthography

Eanna texts refer almost exclusively to LÚ.PAN.ME(Š) *ša* LÚ.SIPA.ME(Š), “the bowmen of the shepherds;” Ebabbar texts refer to persons (*ša*) *qašti*, with a number of variants: LÚ.ERÍN(.MEŠ) *ša* GIŠ.PAN (passim), LÚ.ERÍN.MEŠ *ša* LÚ.PAN.MEŠ (Camb 18:4f.), LÚ.ERÍN GIŠ.PAN (CT 56 566:9), LÚ.SIPA.MEŠ LÚ.APIN.MEŠ *u* LÚ.NU.GIŠ.KIRI₆.MEŠ *ša* GIŠ.PAN (NbK 220 1f., also Nbn 1127:1f., CT 55 69:1f., and BM 67199:2f.¹), and LÚ.GIŠ.PAN (passim).² These examples all refer to people serving the obligation; only one text of which I am aware refers unambiguously to the bow obligation itself. BRM 1 101, from the Ebabbar archive, is a sublease of the Ebabbar’s land from a General Contractor named Bulṭaja to a Šamaš-kāśir. Lines 24f. read:³ *mišil qašti* (GIŠ.PAN) *ša ikkarāti u nukuribbū ša ina muhhi Bulṭaja Šamaš-kāśir ana dulli šarri ana rab qašti ša Ebabbar inamdin*, “half of the bow-(obligation) of the temple-farmers and

¹ The first few lines of BM 67199 are transcribed in A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997), 131 and Michael Jursa, *Die Landwirtschaft in Sippar in neubabylonischer Zeit*, Archiv für Orientforschung, Beiheft 25 (Vienna: Institut für Orientalistik der Universität Wien, 1995), 22f. note 69. Bongenaar (*Prosopography*, 131) also adds BM 75152 and 75605 to this list.

² The reading of LÚ.PAN as *ša qašti* (*ša qalti*) has been suggested by the CAD on lexical evidence (s.v. *qaštu*) and adopted by Erlend Gehlken, *Uruk: Spätbabylonische Wirtschaftstexte aus dem Eanna-Archiv*, II: *Texte verschiedener Inhalts*, Ausgrabungen in Uruk-Warka Endberichte, Band 11 (Mainz am Rhein: von Zabern, 1996), 47 (where he reads LÚ as *ša₁₁*).

³ For an edition of this text, see Jursa, *Landwirtschaft*, 103ff. Also, CT 56 11 rev. 4 mentions sandals (? written KUŠ.me-še-e-ti) *ša qašti* (GIŠ.PAN) *ša MU.2.[KAM]*, which may refer to the obligation as such.

gardeners, which is due from Bultaja, Šamaš-kāśir will give to the chief Bowman of the Ebabbar for the work of the king.”⁴ The phrase *qaštu ša ikkarāti u nukuribbū* does not mean “the archer(s) of the temple farmers and gardeners” as there was a standard wording for this in Ebabbar texts (i.e., *ikkarātu u nukuribbū ša qašti*).⁵ Also, the fact that *qaštu* is described as *ina muhhi* PN indicates that it refers to the obligation itself; a reference to personnel would instead require *ina pan* PN or the like.

III. Organization of the Bowmen

BRM 1 101:24f. states that the bow obligation is *ana dulli šarri*, “for the work of the king.” Other Ebabbar texts also associate the obligation with service to the royal administration.⁶ Similarly, Eanna texts associate the bow obligation with the *maṣṣartu ša šarri*, “the watch of the king” (see here, pp. 227ff.). Texts from both archives impart considerable information about the bowmen as they prepared for the obligation, but very little exists to tell us what in fact comprised royal service.

TCL 13 140 provides a good overview of the organization of the Eanna’s bowmen, at the same time revealing the incomplete and tantalizing nature of the evidence.

⁴ A guarantee (*pūt ... našū*) follows this phrase in which Šamaš-kāśir takes further responsibility for his half of the bow obligation. The text is unfortunately broken and illegible at crucial parts, see Jursa, *Landwirtschaft*, 103f.

⁵ The only exception to this of which I am aware is CT 55 780:3ff., an administrative note for five sacks for PN LÚ.GAL GIŠ.[PAN] šá LÚ.SIPA.[M]EŠ.

⁶ See the texts cited by Bongenaar, *Prosopography*, 131ff. See also Jursa, *Landwirtschaft*, 22f., 103ff. (to BRM 1 101), and John MacGinnis, “BM 64707 and *rikis qabli* in the Ebabbar,” *WZKM* 88 (1998): 177-183.

TCL 13 140
Uruk (Eanna)

24-III-07
Cyrus

obv.

1. 17 LÚ.ERÍN.ME šá ŠU^{II} m^lBA!-a DUMU-šú^l šá ^{md}na-na-a-KAM
2. 7 LÚ.ERÍN.ME šá LÚ.SIPA.ME šá ŠU^{II} m^dDÙ-a DUMU-šú šá ^{md}AG-ŠEŠ.ME-GI
3. 5 LÚ.ERÍN.ME šá LÚ.SIPA.ME šá ŠU^{II} m^dDÙ-d¹⁵ DUMU-šú šá ^{md}MU-DU
4. PAP 29 LÚ.GIŠ.PAN.ME šá LÚ.SIPA.ME šá ŠU^{II} LÚ.GAL *bu-lim*.ME šá še-e-nu
5. šá ^dGAŠAN šá UNUG.KI šá ^mga-du-bu A-šú šá ^mina-GIŠ.MI-^dna-na-a
6. *u* ^{md}UD-SIPA-šú-nu A-šú šá ^mŠEŠ-im-me-e šá *ina* DU-zu šá ^{md}NIN.IB-KAR-*ir*
7. LÚ.A.KIN šá ^{md}UD-DIN-su-iq-bi LÚ.GAL *ka-da-a-nu a-na*
8. ^{md}AG-DU-DUMU.UŠ LÚ.ŠÀ.TAM É.AN.NA <<LÚ.ŠÀ.TAM É.AN.NA>>
9. DUMU-šú šá ^mna-di-nu DUMU ^mda-bi-bi *u* ^{md}AG-ŠEŠ-MU LÚ.SAG.LUGAL
10. LÚ.EN *pi-qit-tum* É.AN.NA *iq-bu-ú um-ma a-na ma-as-ṣar-tum* [LUGAL]
11. *ina* É *ka-a-du ina* UGU ÍD.IDIGLAT *ú-šu-uz-zu*
12. *ù* 3 LÚ.GIŠ.PAN.ME šá ^mki-na-a A-šú šá ^mdan-nu-^dU^l.[GUR]
13. ^{md}15-MU-KAM A-šú šá ^{md}AG-DÙ-uš *u* ^{md}AG-BAD-[IGI-ia]

rev.

14. LÚ.NA.GADA.ME šá še-e-nu *i-bu-ku-nim-ma* [...]
15. ^{md}NIN.IB-KAR-*ir* LÚ.A.KIN šá ^{md}UD-DIN-su-[iq-bi]
16. *a-na* É *ka-a-du* [...] *e-lat* 8 LÚ.GIŠ.PAN.ME
17. šá ^mBA-šá A-šú šá ^{md}na-na-a-KAM *ina* ^dEN ^dAG ^dGAŠAN šá UNUG.KI
18. *u* ^dna-na-a *it-mu-ú ki-i a-di* UD.26.KAM šá ITI.SIG₄
19. *ab-ba-kam-ma a-na* É *ka-a-du a-šap-pa-ru a-dan-nu*
20. *ul te-ti-qu* LÚ.mu-kin-nu ^mna-di-nu DUMU-šú šá ^{md}EN-ŠEŠ.ME-BA-šá
21. DUMU ^me-*gi-bi* ^mSIG₅!(wr. ID)-*iq-d*AMAR.UD DUMU-šú šá ^{md}AG-MU-DU
22. DUMU ^me-*ṭi-ri-d*AMAR.UD <^m>DUB-NUMUN DUMU-šú šá ^mDIN DUMU ^mmi-*sir-a-a*
23. *u* ^{md}UD-DIN-*ṭi* DUMU-šú šá ^mna-di-nu DUMU ^mLÚ-ú ^mIR-^dAMAR.UD
24. DUB.SAR DUMU-šú šá ^{md}AMAR.UD-MU-MU DUMU ^{md}EN-DUMU.UŠ-ŠEŠ
25. UNUG.KI ITI.SIG₄ UD.24.KAM MU.7.KAM
26. ^mku-ra-áš LUGAL TIN.TIR.KI LUGAL KUR.KUR

An edition of this text appears in Ellen Whitley Moore, *Neo-Babylonian Business and Administrative Documents* (Ann Arbor: University of Michigan Press, 1935), no. 140, and lines 12-13 are incorrectly transcribed in Hans Kümmel, *Familie, Beruf und Amt im spätbabylonischen Uruk*, Abhandlungen der Deutschen Orient-Gesellschaft, 20 (Berlin: Mann, 1979), 50.

(1-3) Seventeen men who are under the control of Iqīšā/Nanā-ēreš; seven men from the shepherds who are under the control of Ibnā/Nabū-ahhē-šullim; five men from the shepherds who are under the control of Ibni-Ištar/Šuma-ukīn.

(4-16) A total of twenty-nine bowmen from the shepherds who are under the control of the herd supervisors of sheep and goats of the Lady of Uruk, about whom Gadubu/Ina-ṣilli-Nanā and Šamaš-rē'ūšunu/Ah-immē—who were in the presence of Ninurta-ētir the messenger of Šamaš-balāssu-iqbi the chief of the outposts—spoke to Nabū-mukīn-apli/Nādinu//Dābibī the chief administrator of the Eanna and Nabū-aha-iddin the royal representative: “(the bowmen) are

stationed for the watch of the king at the outpost on the Tigris. And the three bowmen whom Kīnā/Dannu-Nergal, Ištar-šuma-ēreš/Nabû-ēpuš, and Nabû-dūr-[pāniya], the herdsmen of sheep and goats, brought forth and [...] —[station(?) them with] Ninurta-ētir the messenger of Šamaš-balāssu-iqbī for the outposts.”

(16-20) This is apart from eight bowmen about whom Iqīšā/Nanā-ēreš swore by Bēl, Nabû, the Lady of Uruk, and Nanā that: “by the twenty-sixth of month III (Simanu) I will bring (them) in and send (them) to the outposts. The deadline will not pass.”

(20-24) Witnesses: Nādinu/Bēl-ahhē-iqīšā//Egibi; Mudammiq-Marduk/Nabû-šuma-ukīn//Ētir-Marduk; Šāpik-zēri/Balātu//Miširaja and Šamaš-uballiṭ/Nādinu//Amēlū; Arad-Marduk/Marduk-šuma-iddin//Bēl-apla-uşur, the scribe.

(25-26) Uruk. The twenty-fourth of month III (Simanu), the seventh year of Cyrus, king of Babylon, king of lands.

One finds an implied four-level hierarchy of personnel in this difficult text, which appears to reference an earlier posting of bowmen and perhaps an order to muster more personnel for the outposts. The bottom two levels correspond to the usual hierarchy for the external management, in that the three men mentioned in lines 1-3 are known herd supervisors (*rab būlis*), and the men under their control (*šābū ša qāti*) are certainly their herdsmen (*nāqidus*, see here, p. 214). The third level is the uppermost temple authorities, who are the chief administrator and royal supervisor of the Eanna. As is often the case in general, one can discern very little about the upper-level temple administration. In the sphere of livestock management I am unable to differentiate between the chief administrator and royal supervisor of the Eanna in terms of responsibilities or areas of influence. The fourth level is represented by the otherwise unknown Gadubu/Ina-ṣilli-Nanā and Šamaš-rē’ušunu/Ah-immê. As these men make arrangements for the “watch of the king” I assume that they represent the royal

administration. Thus, we see the royal administration perhaps issuing orders to the uppermost temple authorities about the use of the temple's herdsmen as bowmen.⁷

The initial categorization of bowmen in TCL 13 140, inelegantly phrased as “bowmen of the shepherds under the control of herd supervisors of sheep and goats” (line 4), uses the same idiom (*ša qāti*, “under the control of”) that one finds in the organization of the external livestock management.⁸ YOS 7 65, a ground-level muster of bowmen at the Eanna, reveals further details about this level of organization.

⁷ See as well YOS 3 44, a letter from an unknown Nabû-kibsu-śarri-uṣur to Kurbanni-Marduk, who is probably the chief administrator of the Eanna (see Kümmel, *Familie*, 143), reiterating the command of the king to muster bowmen.

⁸ See here, Chapter Three, p. 95. Kümmel, *Familie*, 50, suggests that there is a distinction between the herd supervisors as livestock organizers and as bow-obligation organizers, but, as he himself notes, the texts make no such distinction.

YOS 7 65

06-IV-08

Uruk (Eanna)

Cyrus

obv.

1. $[^m]DÙ-d$ 15 DUMU-šú šá md é-a-GI LÚ.PAN šá md IN.NIN-MU-GAR-un DUMU-šú šá ^{mg}i -
[*mil-lu*]
 2. md AG-SIPA-šú-nu DUMU-šú šá $^{mLÚ-d}$ na-na-a LÚ.RIG₇ šá *ina ka-da-a-nu*
 3. $^{m}nar-gi-ia$ LÚ.PAN šá md na-na-a-SÍSKUR DUMU-šú šá $^{m}IR-ia$
 4. md UD-MU LÚ.PAN šá md ki-na-a DUMU-šú šá $^{m}AG-ŠEŠ.MEŠ-GI$
 5. $^{m}ZALÁG-e-a$ LÚ.PAN šá md 15-DU-IGI < DUMU-šú > šá md AG-ŠEŠ.MEŠ-GI
 6. md IN.NIN-NUMUN-BA-ŠÁ LÚ.PAN šá md 15-MU-KAM DUMU-šú šá md AG-DÙ-uš
 7. $^{md}za-ba_4-ba_4$ -MU-MU LÚ.PAN šá $^{m}ka-si-ri$ DUMU-šú šá $^{m}DÙ-d$ 15
 8. PAP 7 LÚ.PAN šá LÚ.NA.GADA.ME šá ŠU^{II} $^{m}IR-d$ EN DUMU-šú šá $^{m}LUGAL-GI.NA$
 9. md INNIN-ŠEŠ-MU LÚ.PAN šá $^{m}zi-ri-ia$ $^{m}gi-mil-lu$ LÚ.PAN šá $^{m}sil-la-a$ A-šú šá $^{m}šá-d$ AG₁-šu-ú
 10. $^{m}ki-nu-na-a-a$ LÚ.PAN šá md a-nu-ŠEŠ-MU DUMU-šú šá [*LÚ-d*AG]
 11. md AG-DIN-iṭ LÚ.PAN šá md 15-ta-ri-bi DUMU-šú šá md AG-id-ri
 12. md a-nu-LUGAL-ŠEŠ LÚ.PAN šá $^{m}MU-GI.NA$ DUMU-šú šá $^{m}IGI-i$ -DINGIR
 13. $^{m}e-rib-šú$ LÚ.PAN šá $^{md}[x]$ -A-MU DUMU-šú šá $^{m}za-bi-lí$
 14. $^{m}haš-da-a$ LÚ.PAN šá $^{m}...$ DUMU-šú šá $^{m}sil-la-a$
 15. md NIN.IB-ŠEŠ- ^{f}MU LÚ.PAN [šá ... DU]MU-šú šá md na-na-a-MU
 16. $^{m}mu-še-zib-d$ EN [LÚ.PAN šá PN DUMU-šú] šá $^{m}ŠEŠ.MEŠ-[...]$
 17. [...] d EN [x x x]
 18. [x x x] [*x x x DUMU-šú šá x x x*]
- rev.
19. [md AG?-x x LÚ.PAN šá md AG-MU₁-MU DUMU-šú šá md na-na-a-URU-eš
 20. $^{m}šá-d$ AG-šu-ú DUMU-šú šá md U.GUR-MU LÚ.PAN šá md AG-BÀD-pa-ni-ia A! ^{m}MU -DU
 21. $^{m}ta-at-tan-nu$ DUMU-šú šá $^{m}haš-da-a$ LÚ.PAN šá md EN-KAM DUMU-šú šá $^{m}na-di-nu$
 22. $^{m}IR-d$ KÙ.SÙ DUMU-šú šá md AG-mu-še-tiq-ud-da DUMU-šú šá md na-na-a-MU
 23. $^{m}EN-šú-nu$ ŠEŠ šá $^{m}da-di-ia$ DUMU-šú šá $^{m}šá-d$ AG-šu-ú
 24. md UD-MU DUMU-šú šá md AG-ŠEŠ-MU DUMU-šú šá $^{m}a-a-ri-mi-$
 25. $^{m}ri-mut$ DUMU-šú šá md EN-ŠEŠ.MEŠ-SU LÚ.PAN šá $^{m}NUMUN-ia$ DUMU-šú šá $^{m}haš-di-ia$
 26. md AG-GI DUMU-šú šá md za-ba₆-ba₆-KAM LÚ.PAN šá $^{m}gab-ri-ia$ u $^{m}IR-ia$
DUMU.MEŠ šá md EN-ŠEŠ.MEŠ-SU
 27. md 30-LUGAL-ŠEŠ DUMU-šú šá $^{m}ki-na-a$ DUMU-šú šá $^{m}dan-nu-d$ U.GUR PAP 9
LÚ.PAN.ME šá ŠU^{II} $^{m}IR-d$ EN
 28. md 15-ŠEŠ-MU LÚ.PAN šá md EN-GI $^{m}IR-d$ EN LÚ.PAN šá md AG-ŠEŠ.MEŠ-DIN-iṭ
 29. $^{m}a-na-É.AN.NA-GUR$ LÚ.PAN šá md na-na-a-MU md AG-ŠEŠ.MEŠ-MU LÚ.PAN šá $^{m}da-na-a$
 30. md na-na-a-MU LÚ.PAN šá $^{m}ni-din-ti$ $^{m}na-di-nu$ LÚ.PAN šá md IM-EN-a-ni
 31. md UD-ŠEŠ-MU LÚ.PAN šá md AG-DÙ-uš $^{m}za-bi-da-a$ LÚ.PAN šá $^{m}ki-na-a$

32. ^mSUM-na-a LÚ.PAN šá ^mam-ma-nu PAP 9 LÚ.PAN.ME šá ŠU^{II} ^mBA-šá PAP 18
LÚ.PAN.ME šá UD.5.KAM šá ITI.ŠU ina É.AN.NA am-ru
33. PAP-ma 39 LÚ.PAN.ME ina pa-ni ^mDÙ-d15 DUMU-šú šá ^{md}é-a-GI
34. LÚ.mu-kin-nu ^{md}UD-DU-DUMU.UŠ DUMU-šú šá ^{md}DI.KUD-ŠEŠ.MEŠ-MU DUMU ^mši-
gu-ú-a
- u.e.
35. ^mna-di-nu DUMU-šú šá ^{md}EN-ŠEŠ.MEŠ-BA-šá DUMU ^me-gi-bi ^{md}30-na-din-[...]
36. DUMU-šú šá ^mib-na-a ^mMU-^dEN DUMU-šú šá ^mŠEŠ-li-ia ^{md}UD-tab-ni-ŠEŠ DUMU-šú
[šá]
37. ^m,^dAMAR.UD-DUB-NUMUN DUMU ^{md}30-TI-ÉR ^mIR-^dAMAR.UD DUB.SAR DUMU-šú
[šá]
38. ^{md}AMAR.UD-MU-MU DUMU ^{md}EN-A-ŠEŠ
39. [UNUG].KI ITI.ŠU UD.6.KAM MU.8.KAM ^mkur-áš
40. LUGAL TIN.TIR.KI LUGAL KUR.KUR

Line 12 On the reading of the patronym at the end of this line see Kümmel, *Familie*, 77 note 173.

Lines 32-33 I am unable to make sense of the subtotals and totals given in these lines. The reckonable groups have seven bowmen (lines 1-8), nine bowmen (19-27), and nine bowmen again (lines 28-32). The total of these alone outnumbers the subtotal given in line 32 (in addition to the fact that we do not know how many lines might be missing in the break). Moreover, as it stands, there does not appear to be enough room in the broken lines 17-18 to supply enough bowmen to render a grand total of thirty-nine (one would need fourteen bowmen, this section appears to list around ten).

Line 33 Kümmel, *Familie*, 60 note 90a believes the repetition of the name Ibni-Ištar/Ea-ušallim from line 1 is a scribal error for the herd supervisor Ibni-Ištar/Šuma-ukīn.

(1-8) Ibni-Ištar/Ea-ušallim the Bowman of Innin-šuma-iškun/Gimillu; Nabû-rē’ušunu/Amēl-Nanā, the oblate who is at the outposts; Nargija the Bowman of Nanā-ušalli/Ardija; Šamaš-iddin the Bowman of Kīnā/Nabû-ahhē-šullim; Nūrēa the Bowman of Ištar-ālik-pāni/›Nabû-ahhē-šullim; Innin-zēra-iqīša the Bowman of Ištar-šuma-ēreš/Nabû-ēpuš; Zababa-šuma-iddin the Bowman of Kāširu/Ibni-Ištar; a total of seven bowmen from the herdsmen who are under the control of Arad-Bēl/Šarru-kīn.

(9-18) Innin-aha-iddin the Bowman of Zērija; Gimillu the Bowman of Šillā/Ša-Nabû-šū; Kinūnaja the Bowman of Anu-aha-iddin/Amēl-Nabû; Nabû-uballiṭ the Bowman of Ištar-tarībi/Nabû-idrī; Anu-šarra-uṣur the Bowman of Šuma-ukīn/Inīili; Erībšu the Bowman of []-apla-iddin/Zābili; Hašdā the Bowman of [...]/Šillā; Ninurta-aha-iddin the Bowman of [...]/Nanā-iddin; Mušēzib-Bēl [the Bowman of PN]/Ahē-[...].

(17-18 broken).

(19-27) Nabû-[xx] the Bowman of Nabû-šuma-iddin/Nanā-ēreš; Ša-Nabû-šū/Nergal-iddin the Bowman of Nabû-dūr-pānija/Šuma-ukīn; Tattannu/Hašdā the Bowman of Bēl-ēreš/Nādinu; Arad-KÙ-SÙ the Bowman of Nabû-mušētiq-uddē/Nanā-iddin; Bēlšunu the brother of Dādija/Ša-Nabû-šū; Šamaš-iddin the son of Nabû-aha-iddin/Ay(a)-rīmī'; Rēmūtu/Bēl-ahhē-erība the Bowman of

Zērija/Hašdija; Nabû-ušallim/Zababa-ēreš the Bowman of Gabrijā and Ardija, the sons of Bēl-ahhē-erība; Sîn-šarra-uşur the son of Kīnā/Dannu-Nergal; a total of nine bowmen under the control of Arad-Bēl.

(28-32) Ištar-aha-iddin the Bowman of Bēl-ušallim; Arad-Bēl the Bowman of Nabû-ahhē-bullit; Ana-Eanna-turru the Bowman of Nanā-iddin; Nabû-ahhē-iddin the Bowman of Dannā; Nanā-iddin the Bowman of Nidintu; Nādinu the Bowman of Adad-bēlani; Šamaš-aha-iddin the Bowman of Nabû-ēpuš; Zabidā the Bowman of Kīnā; Iddinā the Bowman of Ammānu; a total of nine bowmen who are under the control of Iqišā.

(32) A total of eighteen bowmen who were inspected on the fifth day of month IV (Du'ūzu) at the Eanna.

(33) A grand total of thirty-nine bowmen at the disposal of Ibni-Ištar/Ea-ušallim.

(34-37) Witnesses: Šamaš-mukīn-apli/Mandānu-ahhē-iddin//Šigūa; Nādinu/Bēl-ahhē-iqišā//Egibi; Sîn-nādin-[...]; [...]//Ibnā; Iddin-Bēl/ŠEŠ-li-ia; Šamaš-tabni-uşur/Marduk-šāpik-zēri//Sîn-leqe-unninnī.

(37-38) The scribe Arad-Marduk/Marduk-šuma-iddin//Bēl-apla-uşur.

(39-40) Uruk. The sixth day of month IV (Du'ūzu), the eighth year of Cyrus, king of Babylon king of lands.

This muster follows a recurring pattern through line 22: PN₁ is the Bowman of PN₂. The bowmen are divided into four groups, three of which are identified as being under the control of (*ša qāti*) a herd supervisor.⁹ The bowmen (the PN₁s) are not known from other texts. The men who are PN₂ are all known herdsman.¹⁰ In most cases there is no evident link between the herdsman and his Bowman, but in line 23, where the text usually labels the Bowman, Bēlšunu is called the brother of Dādija/Ša-Nabû-šū, and lines 22, 24, and 27 describe the PN₁ as DUMU-ŠÚ ŠÁ PN₂, “the son of PN₂,” instead of the usual LÚ.PAN ŠÁ PN₂,

⁹ The groups in lines 1-8 and 19-27 are under the control of Arad-Bēl/Šarru-kīn; the group in lines 28-32 is under the control of Iqišā/(Nanā-ēreš). The name of the herd supervisor for the group in lines 9-18 is broken.

¹⁰ See Kümmel, *Familie*, 51, but note that he has interchanged PN₁ and PN₂.

"the bowman of PN₂." These lines suggest that at times immediate family members acted as the bowman in place of the herdsman.¹¹

That a representative served the bow obligation in place of a herdsman implies that the obligation was transferable. It also suggests that the obligation was realized at an organizational level above that of the individual.¹² That is to say, references to one family member serving in place of another suggest that the obligation fell upon family units and is therefore not the type of obligation in which all male members of a particular household (including young children and old men) were called up for service.¹³ This point is reinforced by Gehlken, *Uruk* II no. 206. The text is unfortunately very broken and fragmentary, but what remains of it is informative. It lists people in groups, which are separated from each other by rulings. The best preserved lines (obv. ii 7'-11' and rev. iii 3-10) illustrate the organizing principle of the text: the first person is called LÚ.PAN, and he is followed by people labeled "his brother" (ŠEŠ-šu); lines obv. ii 11' and rev. iii 6' seem to indicate that other, certainly related,¹⁴ people were also included within each group. The mention of a bowman makes it almost certain that this text represents a

¹¹ See Kümmel, *Familie*, 51. Also Durand *Textes babyloniens* 66:22ff. mentions the mustering of replacements for the bowmen (10 LÚ.GIŠ.[PAN...] *ku-tal-šú-nu i-de-ku-ma a-na* ^{m̄d}U.GUR-GI LÚ.GAL *bu-ú-lu šá* ^dGAŠAN *šá UNUG.KI a-na ka-da-an-nu i-nam-din*, "he will muster ten bowmen [as?] their substitutes and give them to Nergal-ušallim the herd supervisor."

¹² Note as well line 26 in which Nabû-ušallim/Zababa-ēreš is called the bowman of the brothers Gabrija and Ardija/Bēl-ahhē-erība.

¹³ See John MacGinnis, "A Corvée Gang from the Time of Cyrus," ZA 93 (2003): 88-115.

¹⁴ The only complete ruled section of Gehlken, *Uruk* II no. 206 is obv. II 7'-11' and rev. III 1-2, which begins with Marduk/Nabû-ušallim and his three brothers Zērūtu, Bēl-lē'i and Nabû-ibni, next follows the "sons of Zērūtu" ([LÚ.DU]MU.ME *šá* ^mNUMUN-tú), which certainly refers to the first brother, and next the sons of Nabû-lē'i and Marduk.

muster of shepherds/herdsman,¹⁵ and, to the extent that it is preserved, appears to verify that each household was represented by a member called the “bowman” (LÚ.PAN). As only one person per section is labeled “bowman,” and there are no subtotals at the end of each section, it is unlikely that each section is a list of related bowmen.

By way of comparison, the ground-level organization of the Eanna’s bowmen differed considerably from that of the Ebabbar of Sippar. At the Ebabbar, three different groups of temple dependents fulfilled the obligation, *rē ūtu ikkarātu u nukuribbū ša Šamaš* “the shepherds, temple farmers, and gardeners of Šamaš.”¹⁶ They appear together as bowmen in NbK 220:1f., Nbn 1127:1f., and CT 55 69:1f.¹⁷ They also appear separately.¹⁸ Apart from one reference to the bow obligation of the “bird catchers,”¹⁹ I know of no other Ebabbar dependent to be associated with the obligation. The three aforementioned groups certainly comprise the *šābū* (“men”) of the *šābū ša qašti*, “men of the bow” frequently found in texts from the Ebabbar archive. These *šābū ša qašti* most often appear with a *rab qašti*, “chief Bowman.”²⁰ The chief Bowman is found in Ebabbar texts alone (passim), as *rab qašti u šābūšu*, “the chief Bowman and his men” (e.g., Nbn

¹⁵ The only prosopographic connection that can be made from this text is Bēl-lē’i/Nabû-ušallim (obv. ii 9’), who is a Bowman in Durand *Textes babyloniens* 66:4 (Nebuchadnezzar II 38) and a known herdsman during the reigns of Cyrus and Cambyses, see Kümmel *Familie*, 58.

¹⁶ On these groups at Sippar see Jursa, *Landwirtschaft*, 7ff.

¹⁷ See here, p. 210 note 1.

¹⁸ The text published by MacGinnis (“BM 64707”) mentions only farmers and shepherds (see pp. 177ff.) and BRM 1 101 only farmers and gardeners.

¹⁹ Nbn 228:8 LÚ.MUŠEN.DÙ šá GIŠ.[PAN], see Bongenaar, *Prosopography*, 131.

²⁰ See Bongenaar, *Prosopography*, 131ff.

288:11f.), or as rarely a variant of these.²¹ Occasionally the *šābū ša qašti* are found without a *rab qašti*.²²

The appearance of conscripted Ebabbar dependents in faceless groups (*šābū*), the administrative nature of the Ebabbar texts, and the fact that many texts remain unpublished all confound an in-depth analysis of the Ebabbar's bowmen. Most of the available evidence concerns the temple farmers, and, by extension, the temple gardeners.²³ In contrast to the Eanna archive, there is very little published information about livestock managers and the bow obligation.

CT 56 481+801(+)808²⁴ is a muster (*amirtu*) of temple farmers, which labels each farmer in descending age groups as *šību* "old," *itbāru* "of age,"²⁵ or, when under five years of age, by year of age (e.g., 4-*ta* MU.MEŠ). They are grouped together in family units under the *rab epinni* "chief plowman." The end of the text gives the totals for each category (old, of age, and then for each age between 4 and 1).²⁶ The penultimate line (21')²⁷ of the text reads: PAP 17 LÚ.GIŠ.PA[N ...] "a total of seventeen bowmen." As

²¹ E.g., CT 57 82:5 LÚ.GAL GIŠ.PAN *u* ERÍN.MEŠ; CT 55 780:4f., LÚ.GAL GIŠ.[PAN] šá LÚ.SIPA.[M]EŠ.

²² E.g., CT 56 554:5f.

²³ See Jursa, *Landwirtschaft*, 7 on the relationship between temple farmers and gardeners.

²⁴ See Jursa, *Landwirtschaft*, 8.

²⁵ On this designation, see Jursa, *Landwirtschaft*, 7f.

²⁶ The rosters of temple gardeners follow much the same pattern. The first name is the *rāb kirî* and he is followed by people who are either his son or brother. There are up to 15 people per familial unit, see Jursa, *Landwirtschaft*, 9ff. (for farmers) and 35ff. (for gardeners)

²⁷ Line 14 in CT 56 481, which is line 21' according to Jursa's reconstruction of the whole text, see Jursa, *Landwirtschaft*, 9.

Jursa argues, the text is most likely a muster of all the temple farmers for that particular (unknown) year.²⁸ The seventeen bowmen may then represent the total number of workers conscripted from the temple farmers for this particular year, which is nearly ten percent of the able-bodied workforce.

This little bit of information in CT 56 481+801(+)808 raises a series of questions: who were these seventeen bowmen? Was each one a representative of a family? Or were they able-bodied men of a few families conscripted at one time? Perhaps the best clue to such queries is CT 56 566. The text is unfortunately very broken, but what little information it does give is pertinent:

CT 56 566
Sippar (Ebabbar)

Undated

- | | |
|--|--|
| (1) [. . .] x | (10) [. . .] ŠI DU MU A ^m AG-[. . .] |
| (2) [. . .] ŠEŠ-šú | (11) [. . .]-la-a ŠEŠ-[šú? . . .] |
| (3) [. . .] A-šú | (12) [. . .] x NU [. . .] |
| (4) [PAP X] ERÍN.MEŠ GIŠ.PAN | (13) [. . .] 「x x」[. . .] |
| <hr/> | (14) [. . .] ŠUK |
| (5) [. . . ^m]UD-ŠEŠ- <i>ir</i> | (15) [PAP X] LÚ.ERÍN.MEŠ GIŠ.[PAN] |
| (6) [. . .] ^m IR- <i>ia</i> | <hr/> |
| (7) [. . .] É AN.KI-DÙ [...] | (16) [x x ^{md}]UD-ŠEŠ-MU A-šú šá ^{md} [. . .] |
| (8) [. . .] ^d UD-ŠEŠ.MEŠ-SU [...] | (17) [. . .]- <i>ia</i> DUMU-šú |
| (9) [PAP X] 4 LÚ.ERÍN GIŠ.P[AN] | (18) [. . .] na-nu DUMU-[šú] |
| <hr/> | (19) [. . .] 「x」 MU DUMU-[šú] |
| | (20) [PAP X LÚ.ERÍN].MEŠ GIŠ.PAN |
| | <hr/> |
| | (21) [. . .] A [. . .] |

²⁸ Jursa, *Landwirtschaft*, 9.

If I understand this text correctly, each ruled section ends with a subtotal of bowmen (the text surely concluded with a grand total).²⁹ The organizing principle for each section appears in lines 2-3, 11(?), and 17-19: each begins with a personal name, followed by a series of persons who are, usually, either sons or brothers of the first-named person. Each section concludes with the total number of people, and these people are called the *šābū ša qašti*. Organization by agnatic family unit parallels the rosters of the temple farmers and gardeners, although the people in CT 56 566 are not given a status (i.e., old, of age, etc.). It is not known if CT 56 566 is part of a roster of one particular temple group (e.g., the bowmen of the temple farmers). It does, however, make a case to assume that at least one segment of the Ebabbar's bowmen were conscripted as familial units made up of able-bodied men. Conscription of familial units parallels in general the use of farmers and gardeners by the Ebabbar. Jursa argues that the temple farmers (and gardeners) at Sippar were essentially a mobile work force, whose situation *vis-à-vis* land exploitation could change at any time.³⁰

Thus, the limited yet revealing evidence for the ground-level organization of bowmen at the Eanna and Ebabbar temples exposes two different systems of conscription: for the Eanna, each family unit of the shepherds is represented by one Bowman, whereas it appears that the Ebabbar conscripted the male members of a nuclear family as a group. The evidence for this reconstruction is admittedly scant and disjointed, but at the same time it is consistent and, as yet, without exception.

²⁹ John MacGinnis has given me transcriptions of three unpublished BM texts (BM 62009, BM 55136, and BM 59761) that, with some exceptional details, follow the same general pattern of CT 56 566. He will discuss these in an upcoming article on the security forces of the Ebabbar.

³⁰ See Jursa, *Landwirtschaft*, 13.

There are a few references to another group of Eanna bowmen. YOS 7 65:2 mentions, uniquely, a Nabû-rē³¹ ūšunu/Amēl-Nanā, the oblate who is at the outposts (*Nabû-rē³¹ ūšunu aplišu ša Amēl-Nanā širku ša ina kadāni*). Although the text subtotals this person with the bowmen of the shepherds in line 8, his specific qualification as *širku* implies that he was separate from them. The distinction between the herdsmen and the oblates as bowmen appears in other Eanna texts.³¹ For example, GCCI 1 80 is headed by the caption (lines 1f.): *sābū ša ana šadādi ša eleppi ša šidīti ša qašti ša širkī* (LÚ.ši-rak) *u rē³¹ ūti Uruk* (LÚ.[SIPA UNUG.KI]) “the men who (are assigned) to tow the boat(s) (text singular) of supplies for the bowmen of the oblates and shepherds of Uruk.” This suggests that oblates and herdsmen (who were, in fact, also considered oblates, see here, Chapter Three, p. 41) remained administratively separate while serving the obligation. Moreover, YOS 7 154 reveals that the oblates as bowmen had a separate organization and mustering process.

³¹ On the Eanna’s oblates in general, see here, Chapter Three, p. 111 note 118. YOS 6 116 refers to the fact that two brothers are not written on the ledgers of the archers (lines 8ff. GIŠ.DA šá LÚ.PAN.MEŠ ... PN₁ u PN₂ ... *ina lib-bi la šá-[aṭ-ru]*) but in fact are written on the ledgers of the oblates of the Lady of Uruk (lines 13f. *ina GIŠ.DA šá dGAŠAN šá UNUG.KI it-ti LÚ.RIG₇.MEŠ šá GAŠAN šá UNUG.KI šaṭ-ru*). The text concludes by stating that the brothers are (in fact) then oblates of the Lady of Uruk (lines 15f. PN₁ u PN₂ LÚ.RIG₇.ME [šá] dGAŠAN šá UNUG.KI šu-nu). This enigmatic text poses more questions than it answers.

YOS 7 154
Uruk (Eanna)

12-VIII-03
Cambyses

obv.

1. *pu-ut šu-uz-zu-uz-zu šá* 50 LÚ.[RIG₇].MEŠ
2. *šá dGAŠAN šá UNUG.KI LÚ.PAN.MEŠ [...]*
3. *šá ka-da-nu mdUD-KAL A-šú*
4. *šá mīna-SÙH-SUR ù mdā-nu-DU-DUMU.UŠ*
5. *A-šú šá mdna-na-a-MU LÚ.RIG₇.MEŠ*
6. *šá dGAŠAN UNUG.KI na-šú-ú*
7. *ITI-ta-àm LÚ.RIG₇ ÀM 50*
8. *e-lat LÚ.HUN.GÁ.MEŠ šá mdINNIN-DU-IGI*
9. *ina ka-da-nu i-si-ni-qu-ma*
10. *[a-na] mdUD-SU LÚ.GAL ka-da-nu*
11. *[. .] DA PI URU.*har-zi-ba-a-a**
12. *[. .] i-nam-di-nu-*
13. *[LÚ.mu-kin]-nu mdUD-DU-DUMU.UŠ A-šú*
14. *[šá mdDI.KUD]-ŠEŠ.MEŠ-MU A mši-gu-ú-a*
15. *mdEN-na-din-[DUMU.UŠ] A-šú šá mdAMAR.UD-MU-MU A mdEN-[DUMU.US]-ŠEŠ*
16. *mdAG-[DUMU.UŠ]-MU A-šú šá mdEN-DIN-iṭ A LÚ.šá-MUN.HI.A-šú*
17. *mdIN.NIN-ŠEŠ.MEŠ-MU A-šú šá mdina-SÙH-SUR*
18. *LÚ.UMBISAG mdAG-DU-DUMU.UŠ A-šú šá mdAMAR.UD-MU-KAM*
19. *A mba-la-ṭu UNUG.KI ITI.APIN UD.12.KAM*
20. *MU.3.KAM m kam-bu-zí-iá LUGAL TIN.TIR.KI*
21. *LUGAL KUR.KUR*

Remarks on this text are found in Raymond Doughtery, *The Shirkûtu of Babylonian Deities*, Yale Oriental Series Researches 2 (New Haven: Yale University Press, 1923), 55 and Muhammad Dandamaev, *Slavery in Babylonia*, trans. Victoria A. Powell (DeKalb: Northern Illinois Press, 1984), 127. The reverse is not marked in the copy.

Line 11. The reading of the name and the location the place URU.*har-zi-ba-a-a* remain unknown.

(1-6) Šamaš-udammiq/Ina-tēšî-ēṭir and Anu-mukīn-apli/Nanā-iddin, oblates of the Lady of Uruk, take responsibility for stationing fifty oblates of the Lady of Uruk (as) the bowmen [...] of the outposts.

(7-12) Monthly they will check the abovementioned fifty oblates in the outposts—apart from the hirelings of Innin-ālik-pāni—and give [...] to Šamaš-erība the chief of the outposts [...] (the city of) Harzibaja.

(13-17) Witnesses: Šamaš-mukīn-apli/Mandānu-ahhē-iddin//Šiguā; Bēl-nādin-apli/Marduk-šuma-iddin//Bēl-apla-uṣur; Nabū-apla-iddin/Bēl-uballīṭ//Ša-ṭābtīšu; Innin-ahhē-iddin/Ina-tēšî-ēṭir.

(18) The scribe: Nabū-mukīn-apli/Marduk-šuma-ēreš//Balāṭu.

(19-21) Uruk. The twelfth day of month VIII (Arahsamna), the third year of Cambyses, king of Babylon, king of lands.

Lines 7-12 of this text indicate that those responsible for stationing the oblates also took responsibility for seeing them through their service. One finds parallels for this within the hierarchy of the external livestock management. In TCL 13 140 (here, pp. 212ff.) the herd supervisors are held responsible for stationing their herdsmen as bowmen in the outposts, and in GCCI 2 102 the Eanna's chief administrator and royal supervisor state to four herd supervisors (lines 7ff.) *alkama qašāti* (LÚ.PAN.ME) *ša rē ūti libbū ša šattussu ina bīt kādāni ša muhhi ÍD.GAL-ti [x?] šuzziza* “go and station the bowmen of the shepherds as is done every year in the outposts which are on the [...] river.”³² Furthermore, AnOr 8 41 suggests that the herd supervisors remained responsible for their herdsmen as they served the obligation.³³

³² On the ÍD.GAL-ti, see commentary to YOS 6 151, here, p. 229.

³³ See also YOS 3 139, here, pp. 232f., and Durand *Textes babyloniens* 66.22ff (here, Chapter Five, p. 218 note 11), which both mention the fact that bowmen substitutes were to be given to the herd supervisor.

AnOr 8 41
Uruk (Eanna)

01-IV-04
Cyrus

obv.

1. $m\bar{s}i-lim$ -DINGIR LÚ.SAG.LUGAL šá muh-*hi* qup-pu šá É.AN.NA
2. $mdAMAR.UD-MU-MU A-šú šá$ $mdAG-ŠEŠ.MEŠ-DIN-i\bar{t}$ A $m\bar{b}a-la-tu$
3. $md30-D\bar{U}$ A-šú šá $mdAG-SIG_5-iq$ DUMU LÚ.SIPA GU₄
4. $mdUD-NUMUN-BA-šá A-šú šá$ $mdIN.NIN-MU-ŠEŠ A$ $md30-TI-ÉR$
5. $m\bar{j}R-dIN.NIN A-šú šá$ $mdD\bar{U}-d15 A$ $m\bar{s}U-dna-na-a$
6. $m\bar{j}R-dIN.NIN A-šú šá$ $m\bar{b}a-lat-su A$ $mZALÁG-d30$
7. $m\bar{s}u-zu-bu A-šú šá$ $mNÍG.DU A$ LÚ.SIPA SÁ.DUG₄
8. $m\bar{p}ir-u A-šú šá$ $mdEN-ú-sat$ DUMU $mdEN-ú-sat$

rev.

9. $mda-nu-MU-D\bar{U} A-šú šá$ $mdAG-SUR A$ $mdAG-šar-ri$ -DINGIR<.MEŠ>
10. LÚ.DUMU-DÙ.MEŠ šá *ina pa-ni-šú-nu* $mni-din-tum-dEN$ LÚ.ŠÀ.TAM É.AN.NA
11. A-šú šá $mdAG-DU-NUMUN$ DUMU $m\bar{d}a-bi-bi$
12. \dot{u} $mdAG-ŠEŠ-MU$ LÚ.SAG.LUGAL LÚ.EN *pi-qit-tum* É.AN.NA
13. *a-na* $m\bar{B}A-šá A-šú šá$ $mdna-na-a-KAM$ $mdD\bar{U}-a$ A-šú šá $mdAG-ŠEŠ.MEŠ-GI$
14. \dot{u} $mdD\bar{U}-d15 A-šú šá$ $mMU-GI.NA$ LÚ.GAL *bu-lum*.MEŠ
15. šá $dGAŠAN$ šá UNUG.KI *iq-bu-ú um-ma* 1-it LÚ.PAN-ku-nu
16. *ull-tu ka-du* šá LUGAL *la ta-mir-ki*
17. LÚ.UMBISAG $m\bar{p}ir-u$ A-šú šá $m\bar{E}.AN.NA-MU-D\bar{U}$ UNUG.KI
18. ITI.ŠU UD.1.KAM MU.4.KAM $m\bar{k}u-raš$ LUGAL TIN.TIR.KI LUGAL KUR.KUR

Line 16 The meaning of *namarkū* in this line is not apparent. It clearly means “stay/lag behind” in other NB contexts, but how that is to be understood when construed with *ultu* GN is unclear to me. The CAD (*s.v. kādū*) translation of, “not even one of your bowmen may leave the outpost of the king” is, I think, erroneous; *namarkū* means quite the opposite. The point of the statement seems to be that no Bowman is allowed to evade duty.

(1-9) Silim-ili the courtier in charge of the cashbox of the Eanna; Marduk-šuma-iddin/Nabû-ahhē-bullit//Balātu; Sîn-ibni/Nabû-mudammiq//Rē'i-alpi; Šamaš-zēra-iqīša/Innin-šuma-uşur//Sîn-leqe-uninni; Arad-Innin/Ibni-Ištar//Gimil-Nanā; Arad-Innin/Balāssu/Nûr-Sîn; Šūzubu/Kudurru//Rē'i-sattukki; Pîr'u/Bēl-usāt//Bēl-usāt; Anu-šuma-ibni/Nabû-ētîr//Nabû-šar-ilānî

(10-16) The citizens in whose presence Nidintu-Bēl/Nabû-mūkin-zēri//Dābibī the chief administrator of the Eanna and Nabû-aha-iddin the royal supervisor of the Eanna spoke to Iqīšā/Nanā-ērēš, Ibni/Nabû-ahhē-šullim, and Ibni-Ištar/Šuma-ukīn, the herd supervisors of the Lady of Uruk, as follows: Not one of your(pl.) bowmen (lit. not one bow, with fem. sing. verb) may stay behind from (service at?) the outpost of the king.

(17-18) The scribe: Pîr'u/Eanna-šuma-ibni.

(17-18) Uruk. The first day of month IV (Du'uzu), fourth year of Cyrus, king of Babylon, king of lands.

In summary, the Eanna drafted two distinct groups to fulfill the bow obligation, which were the herdsmen and the oblates. The groups were recruited independently, and they appear to have remained in their peer groups under the responsibility of local managers as they fulfilled the obligation. The oblates as bowmen appear only in a few texts; much more is known about the mustering and organization of the herdsmen as bowmen. It appears that the obligation was levied upon the household of each herdsman. This differs from the organization of the bowmen at the Ebabbar, where it appears that a household's able-bodied men were conscripted at one time. The herd supervisors, who had control over the herdsmen as livestock managers, maintained control over them as bowmen. They were clearly held responsible for mustering their herdsmen for the obligation, and may have also been held responsible for them as they fulfilled their service at the outposts.

IV. The Herdsmen as Bowmen

The Eanna's bowmen set out to perform the watch of the king (*massartu ša šarri*) at the outposts (*kādu*, pl. *kādānu*).³⁴ As we have seen, the herd supervisors took responsibility both for mustering their herdsmen and perhaps also for seeing that the herdsmen served out the obligation. It also appears that the herdsmen retained an internal

³⁴ Mariano San Nicolò posits that the bowmen served a sort of police function ("Materialien zur Viehwirtschaft in den neubabylonischen Tempeln II," *Or. NS* 18 [1949]: 288, see also CAD Q 156a, yet see Kümmel, *Familie*, 51), and in addition Bongenaar (*Prosopography*, 131), citing several unpublished texts from the Ebabbar archive, states that "the bowmen—not necessarily the same bowmen who performed the bow service of the king—furthermore protected temple personnel who worked outside the city ... and personnel who went on expeditions." I know of no evidence that there was a separate mustering of bowmen at the Eanna for guarding the temple or its personnel, nor can I connect the royal bow obligation to such a duty.

hierarchy as they went about their service. According to YOS 6 151 the bowmen were organized in groups, ostensibly of ten men, each with a decurion in charge.

YOS 6 151
Uruk (Eanna)

13-V-10
Nabonidus

- obv
1. $mib-ni-d$ 15 A-šú šá md AG-ŠEŠ.MEŠ-GI
 2. md U.GUR-MU-DÙ A-šú šá m ŠEŠ.MEŠ-šá-a
 3. m BA-šá A-šú šá md na-na-a-ERIN-eš
 4. m muk-ki-e-a A-šú šá m mar-du-ku
 5. md AG-mu-še-ti-iq-ud-da A-šú šá md AG-MU-MU
 6. m na-di-nu A-šú šá md e-a-GI
 7. md AG-na-şir A-šú šá m la-a-qí-pi
 8. u md U.GUR-na-şir A-šú šá md EN-ŠEŠ.MEŠ-SU
 9. LÚ.GAL 10.MEŠ šá 70 LÚ.PAN.MEŠ šá LÚ.SIPA.MEŠ
 10. šá d GAŠAN šá UNUG.KI šá ina UGU ÍD i-di-ik-[ku-ú]
 11. a-di UD.20.KAM šá ITI.NE LÚ.PAN.MEŠ [AM]
 12. 70 i-di-ik-ku-ú-ma ina IGI ÍD i-[...]
- lo.e.
13. a-na m NUMUN-kit-ti-SI.SÁ A-šú šá md U.GUR-G[I]
 14. LÚ.GAL PAN.MEŠ i-nam-di-nu
 15. šá a-di UD.20.KAM LÚ.PAN-su a-na É ka-a-du
- rev.
16. la ib-ba-ku-ú-ma ma-aş-şar-tum šá LUGAL
 17. la i-na-aş-şä-ru hi-tu šá LUGAL i-şá-ad-da-ad
 18. e-lat LÚ.PAN.ME šá LÚ.SIPA šá d GAŠAN šá UNUG.KI šá ina IGI md AG-LUGAL-ŠEŠ šá-ak-[nu]
 19. i-na DU-zu šá md AG-LUGAL-ŠEŠ LÚ.SAG LUGAL
 20. LÚ.EN pi-qit-tum É.AN.NA LÚ.mu-kin-nu
 21. m ki-rib-tum A-šú šá m na-di-nu A m ba-bu-tum
 22. md DI.KUD-ŠEŠ.MEŠ-MU A-šú šá m gi-mil-lu
 23. A m ši-gu-ú-a m AG-DU-A A-šú šá m na-din A m da-bi-bi
 24. m šu-ma-a A-šú šá md DÙ- d IDIM A LÚ.ÁZLAG
 25. md IN.NIN-NUMUN-GÁL-şı A-šú šá m ap-la-a
 26. A $^{md}30$ -TI-ÉR LÚ.UMBISAG m na-di-nu
 27. A-šú šá md EN-ŠEŠ.MEŠ-BA-şá A m e-gi-bi
 28. UNUG.KI ITI.NE UD.13.KAM MU.10.KAM
 29. d AG-IM.TUK LUGAL TIN.TIR.KI

This text is partially transliterated and translated in Kümmel, *Familie*, 51f.

Lines 10, 12: The mention of the river (ÍD) remains unclear. Other occurrences of the *būt kādi* with a river mention the Tigris (TCL 13 140:11, here, pp. 212ff.) and the unique *nāru rabītu* (GCCI 2 102:9, here, p. 225). Francis Joannès (*Textes économiques de la Babylonie récente*, Études Assyriologiques, 5 [Paris: Éditions Recherche sur les Civilisations, 1982], 179) connects these citations to YOS 6 155, in which the Eanna leases a herd of sheep and goats in the village of *Tagaritenu* to a herdsman (see here, Chapter Three, pp. 40ff.). The name was linked to the village of Tekrit in Assyria by San Nicolò ("Materialien zur

Viehwirtschaft in den neubabylonischen Tempeln I," *Or. NS* 17 [1948]: 292 n.1; yet note that in citing YOS 7 143:20 and YOS 3 106:25, he adds "Der letzte Beleg schliesst übrigens die Möglichkeit eines gleichnamigen Ortes in der Nähe von Uruk, woran man denken könnte, aus."). I think San Nicolò's circumspection is warranted. Joannès (*Textes économiques*, 179, 182) states that in effect all these references are to an outpost of the Eanna in the area of modern Tekrit. All this notwithstanding, YOS 6 151 refers neither to the Tigris nor to the *nāru rabītu* specifically.

(1-10) Ibni-Ištar/Nabû-ahhē-šullim, Nergal-šuma-ibni/Ahhēšaja, Iqīšā/Nanā-ēreš, Mukkēa/Marduk(u), Nabû-mušētiq-uddē/Nabû-šuma-iddin, Nādinu/Ea-ušallim, Nabû-nāšir/Lāqīpu, Nergal-nāšir/Bēl-ahhē-erība; (these are) the decurions who will call up seventy bowmen of the shepherds of the Lady of Uruk to(?) the river.

(11-14) By the twentieth of month V (Abu) they will call up the said 70 bowmen and give them at the river [...] to Zēr-kitti-līšir/Nergal-ušallim the chief Bowman.

(15-17) He who does not bring forth his Bowman to the outpost by the twentieth and does not perform the watch of the king, will suffer the punishment of the king.

(18) This is apart from the bowmen of the shepherds (text sing.) of the Lady of Uruk who are placed at the disposal of Nabû-šarra-uşur.

(19-20) (This obligation was formulated) in the presence of Nabû-šarra-uşur, the royal supervisor of the Eanna.

(20-26) Witnesses: Kiribtu/Nādinu//Bābūtu; Mandānu-ahhē-iddin/Gimillu//Šiguā; Nabû-mukīn-apli/Nādinu//Dābībī; Šumā/Ibni-Ea//Ašlāku; Innin-zēra-ušabši/Aplā//Sîn-leqe-uninnī.

(26-27) The scribe: Nādinu/Bēl-ahhē-iqīša//Egibi.

(28-29) Uruk. The thirteenth of month V (Abu), tenth year of Nabonidus, king of Babylon.

Of the eight decurions (*rab ešertis*) listed in YOS 6 151, seven of can be confidently identified with known herdsmen.³⁵ Indeed, the fact that actual herdsmen are named here

³⁵ Nergal-šuma-ibni, Iqīšā, Nabû-mušētiq-uddē, Nādinu, Nabû-nāšir, and Nergal-nāšir are all known from other texts as herdsmen (s.vv. Kümmel, *Familie*). Nergal-nāšir is found as a herdsman in Dillard NB Lewis Coll.: FLP 1584:5f. Ibni-Ištar/Nabû-ahhē-šullim is certainly identical with the herdsman (and later herd supervisor) Ibni/Nabû-ahhē-šullim (see Kümmel, *Familie*, 60). Kümmel is skeptical about these identifications. He lists each separately from the known herdsman with the same name, usually with a queried cross-reference to that herdsman. Given the weight of the evidence, this strikes me as unnecessary (see also Francis Joannès, *Textes économiques de la Babylonie récente*, Études Assyriologiques, 5 [Paris: Éditions Recherche sur les Civilisations, 1982], 188 n. 2). Mukkēa/Marduk(u) is not known from other texts, although TCL 12 119:17 mentions the death of a herdsman named Nabû-šuma-ibni/Marduk(u) and refers to a "Mukkēa ah[išu], "Mukkēa, his brother," in a broken context that may refer to that Nabû-šuma-

indicates that at times, perhaps only when they acted as decurions, they performed the service themselves. The decurions may appear again in GCCI 1 80 (see here, p. 223). The text lists men in groups of two, and each subtotal reads: *naphar 2 ša 10-ti ša PN*, “a total of two (men) from the (group of) ten of PN.” That there are only a few references to decurions in the Eanna archive may indicate that it was the organizational unit used only after the bowmen left the Eanna’s jurisdiction.³⁶

As we have seen, the bow obligation is intimately associated with the staffing of outposts. As little evidence exists for the bowmen after their posting there, it is likely that the outposts fell under the bureaucratic jurisdiction of the royal administration. The fragmentary letter YOS 3 139 has one of the few mentions of the Eanna’s bowmen, albeit by implication, after they had been mustered and sent out. Yet even here the purport of the letter is to inform the recipient that the Eanna’s responsibility to keep the men on post had gone unfulfilled.

ibni. In either case, the fact that seven of the eight are herdsmen makes it quite likely that Mukkēa was one as well.

³⁶ Michael Jursa, *Das Archiv des Bēl-rēmanni*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 86 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1999), 101ff. argues that the royal administration organized persons in groups of ten or by “bow unit,” and that leadership of the group rotated among its members (the leader took the title *rab ešerti*, *rab qašti*, and so on, see ibid. 104 and also Kathleen Abraham, *Business and Politics under the Persian Empire*, [Bethesda: CDL Press, 2004], 57ff.). Decurions appear in various functions in Ebabbar texts (see Bongenaar, *Prosopography*, 130 and MacGinnis, “Corvée Gang,” 104ff.), but they are found only in association with the livestock managers in the available texts from the Eanna. The Eanna bowmen seem to acquire the organization by decurions only after they leave the Eanna; before then they retain the hierarchy of livestock management. It is thus possible that they set up in units of ten to conform to the system of the royal administration, but with such limited evidence it remains impossible to know for certain.

YOS 3 139
Uruk (Eanna)

Undated

- obv.
1. IM ^{md}EN-NUMUN-DÙ *a-na*
 2. ^{md}AG-DU-NUMUN ŠEŠ-iá
 3. dPA u dŠÚ *a-na ŠEŠ-iá*
 4. *lik-ru-bu en-na ITI 1-šú*
 5. LÚ.A.KIN šá LUGAL *il-la-ku*
 6. *u ri-e-šú ka-da-nu*
 7. *i-nam-ši ù man-ma*
 8. *ina ka-da-ni-ka*
 9. *ia-a-nu LÚ.[HUN].GÁ.MEŠ*
 10. *ina UGU it-ti-qu*
- lo.e.
11. *ina lib-bi*
 12. *šá a-na*
 13. 「KÚ.BABBAR-iá(?)」 *ta-az-zi-zu*
- rev.
14. *a-na LUGAL ina UGU*
 15. *ul áš-pur u ^{md}UD-NUMUN-DÙ*
 16. *LÚ.GAL bu-ul-lu*
 17. *ka-da-ni-šú mu-šu-ru-*’
 18. *iš ŠU^{II} i-di-ši-ma*
 19. *šup-raš-šú u LÚ.ERÍN-šú*
 20. *šu-ur-šu-du-tu*
 21. *til-lu iz-ma-ru-ú*
 22. *u GÍR AN.BAR.MEŠ*
 23. *lu-bu-šá!-tu u*
 24. *[kar]-[ball]-la-tú*
 25. *[lu šu-ur-šu]-du-*’

An edition of the text appears in Ebeling Neubab. Briefe, no. 139 (C. 122); it is also discussed by Michael Streck, *Zahl und Zeit: Grammatik der Numeralia und des Verbalsystems in spätbabylonischen, Cuneiform Monographs 5* (Groningen: Styx, 1995), 73 (line 4), 114, 176 (both lines 4-9).

(1-3) Letter of Bēl-zēra-ibni to Nabū-mukīn-zēri, my brother. May Nabū and Marduk bless my brother.

(4-9) Now, every month (or: once a month) the messenger of the king comes and inspects the outposts, and there is nobody in your outposts.

(9-10) (Only) the hirelings pass by (for inspection[?]) there.

(11-15) As to (the fact) that you *served for money from me*—I did not write to the king about that.

(15-25) And (as for) Šamaš-zēra-ibni the herd supervisor, his posts are deserted.
Throw him in shackles and send him to me! But his outfitted men should be
[equipped(?)] with quivers, lances and iron daggers, clothing and headgear.

The mention of weapons at the end of this letter hints at an aspect of the bow obligation that has gone mostly unappreciated: to wit, not only did the Eanna muster and assume surety for its bowmen, it also equipped and provisioned them for the period of the obligation. The equipping and provisioning of the Eanna's bowmen are spelled out explicitly in a few texts and referenced briefly or parenthetically in others. References to the equipping of bowmen is much more common in the Ebabbar archive than the Eanna,³⁷ but there is no reason to assume that, at least in general, the Eanna's outfitting differed considerably from the Ebabbar's. Bongenaar's concise description of the fitting out of the Ebabbar's bowmen hints at the wealth of information to be found in the unpublished material at the British Museum.

Joannès lists the weapons of each Eanna Bowman as follows:³⁸ one bow (*qaštu*), either of Cimmerian or Akkadian style; one lance (*azmarû*); one sash-dagger and one sash (*patru ša qabli, šalladu*); one iron belt-dagger with scabbard (*patru parzillu ša tilli*); one shield (*sallu*); and 20 to 30 arrows (*šiltāḥu*) of various types. Excepting the shield, all of these are paralleled in the Ebabbar archive. In addition, Ebabbar texts regularly mention the equipping of the bowmen with a quiver (*tillu*), a (woolen) poncho (TÚG.KUR.RA), headgear (*karballatu*), a coat or cuirasse (*siriam/šir ɬam*), and shoes/sandals

³⁷ See Bongenaar, *Prosopography*, 131ff., for a list of the foodstuffs, weapons, and equipment given to the Ebabbar's bowmen.

³⁸ *Textes économiques*, 183-190.

([me]šēnu).³⁹ The Eanna parallels for garments and paraphernalia are not numerous: TCL 12 114:3 mentions a quiver; the poncho and shoes/sandals are mentioned in GCCI 2 211:10-14; and YOS 7 7:140 mentions the coat/cuirasse in association with the bow obligation. I know of no unequivocal reference to a Bowman's headgear in the Eanna archive.

Bongenaar lists the foodstuffs given to the Ebabbar's bowmen as: cress, salt, oil, barley and dates; one should also add beer to this list (see CT 56 553:3). Again, there are very few textual parallels for this in published Eanna texts. GCCI 2 206 mentions two indeterminate rations (SUK.HI.A.ME) at the disposal of a Bowman, and TCL 12 113 is a letter order to give dates to the outposts for rations. There is, however, evidence from TCL 12 110 that the Eanna gave silver to the bowmen for provisions, as is also the case at the Ebabbar.⁴⁰

³⁹ Text citations for these items at the Ebabbar are given in Bongenaar, *Prosopography*, 133f. Exceptional issuances include various types of bags and/or containers (e.g., *nūtu*, *ḥambanūtu*, *lubūru*) and tools for agricultural work.

⁴⁰ Exceptionally, YOS 7 143 rev.(!) 5 mentions 1 U₈.SAL.MAH_x *a-na* 1 GÍN KÙ.BABBAR *ina* ŠUK.ME šá LÚ.ERÍN.ME šá *ka-a-du* ^{md}*a-nu-š*DU-DUMU.UŠ¹, “1 barren ewe (issued as the equivalent of) one shekel of silver for the rations of the men of the outposts (under?) Anu-mukīn-apli” (see here, Chapter Four, pp. 147ff.).

TCL 12 110
Uruk (Eanna)

08-VI-14
Nabonidus

obv.

1. 4 2/3 MA.NA KÙ.BABBAR SUK.HI.A
 2. šá 40 LÚ.PAN šá LÚ.SIPA.ME
 3. šá *ul-tu lib-bi* ITI.KIN
 4. *a-di lib-bi* ITI.ŠE
 5. *a-na mMU-MU A-šú*
 6. šá ^{md}U.GUR-GI LÚ.[šá UGU GIŠ.PAN SUM]
- rev.
7. ITI.KIN UD.8.KAM
 8. MU.14.KAM ^{md}AG-IM.TUK
 9. LUGAL TIN.TIR.KI

(1-6) 4 2/3 mina of silver (for) rations of forty bowmen of the shepherds for (the period) from month VI (Ulūlu) to month XII (Addaru) [given] to Šuma-iddin/Nergal-ušallim [who is in charge of the bow obligation].

(7-9) Month VI (Ulūlu), day eight, fourteenth year of Nabonidus, king of Babylon.

Šuma-iddin/Nergal-ušallim is found again in YOS 7 7:142f. with the title *ša muhhi qašāti* (LÚ.PAN.MEŠ) *ša rē ḫ̄ti ša itti šarri*, “the one over the bow obligation(s) of the shepherds who (are) with the king.” He is almost certainly mentioned again in TCL 12 112:8, which mentions silver for the remaining travel provisions (*sidītu*) for the bowmen of the shepherds, sent via three persons at the end of month XII (Addaru) to a Šuma-iddin. The specification of a six-month period in TCL 12 110 (months VI-XII) and the end of month XII, and thus presumably the beginning of a new six-month period, in TCL 12 112 led Joannès to posit that these two texts reference two distinct periods for the mustering of bowmen.⁴¹ This is possible, but it should be noted that neither text in fact refers to the

⁴¹ *Textes économiques*, 189 “ceux-ci attestent en effet deux périodes de levée des archers, l'une de début de l'année à Ulūlu, l'autre de Ulūlu à la fin de l'année, soit deux périodes de 6 mois.” Note, however, that TCL 12 110 does not specify when the period begins or ends within months VI or XII, so it is

levying of bowmen. Instead, the texts refer to payments made for rations and travel provisions, and it is just as possible that such payments were made on a schedule that was not in any way connected to the levying of bowmen.

Evidence from both Eanna and Ebabbar texts gives the following items for the complete outfitting of an archer:

Weapons: 20-30 arrows, quiver, bow and case, lance, dagger (belt and sash), shield

Clothing: Poncho/blanket, headgear, coat/cuirass, shoes/sandal

Foodstuffs: barley, dates, oil, beer, cress

Other: Silver, containers and bags

The “fitting out”—Babylonian *rikis qabli*, lit. “binding of the waist”—of an archer for royal service is also referenced in private Babylonian archives from the first millennium.

The most common understanding of this term is that it refers to the process by which persons acquired matériel for compulsory military service, and thus by extension the costs of the matériel itself.⁴² In these contexts *rikis qabli* is most often found in documents in which an outside party extends credit to those on whom such an obligation

possible that the text is actually marking a transfer of silver to be used over a seven-month period (i.e., months VI-XII, inclusive). In fact, 280 shekels of silver over seven months would be 40 shekels per month, which would then equal one shekel per man per month.

⁴² Govert van Driel (*Elusive Silver*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 95 [Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 2002], 249) defines *rikis qabli*, generally, as “equipment costs” and adds, “[i]n a technical sense it is a type of costs incurred in connection with obligations resulting from holding a fief.” This latter qualification of the term is not directly applicable to the Eanna’s bowmen, but it is entirely possible that their service was part of a greater arrangement between the royal administration and the temple that may have included exchanges of various sorts (land, water rights, etc.) for, among other things, personnel for royal service.

fell. Van Driel is almost certainly correct that in private contexts the service for which *rikis qabli* became necessary was attached to ownership of a military “fief.”⁴³

That credit was needed to acquire matériel for service is not surprising. Although the crown granted land in order to defray the costs of service,⁴⁴ the requisite woven textiles, shoes, chain-mail, headgear, crafted and assembled weapons (lance, daggers, bows and arrows), and other accessories were certainly not in the immediate reach of most Babylonians and foreign colonists. Given Babylonia’s attachment to the agrarian cycle, it is also possible that some turned to creditors at particular times of the year when reserves were low (i.e., just before the harvest), whereas such costs could have been absorbed with advance planning. Whatever the case may be, the cost was significant, probably infrequent, and managed directly by the fieholders.

There is, however, no information regarding *how* fief-bound recruits were equipped: that is, did they buy weapons from state-controlled blacksmiths or armories? Were the arms bought at the market or perhaps rented from an arms depot? Did they hire specialized craftsmen to make the items? This line of questioning is especially germane because, by contrast, *rikis qabli* in the temple context was autonomous and self-sustained: the men were attached to the temple (in various ways); the mobilization made use of

⁴³ Van Driel, *Elusive Silver*, 249. Yet see Michael Jursa, *Das Archiv des Bēl-rēmanni*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 86 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1999), 103f and 109f, and Matthew Stolper, “Fifth Century Nippur: Texts of the Murašūs and from their Surroundings,” *JCS* 53 (2001): 124 (with literature) for arguments that such encumbrances were also attached to urban property.

⁴⁴ See van Driel, *Elusive Silver*, 249f. and Guillaume Cardascia, “Armée et fiscalité dans la Babylonie achéménide,” in *Armées et fiscalité dans le monde antique*, Colloques Nationaux du Centre National de la Recherche Scientifique, 936 (Paris: Éditions du Centre National de la Recherche Scientifique, 1977), 1-10 (esp. 6ff.).

existing personnel hierarchies;⁴⁵ the personnel were equipped with clothes made by temple weavers and used armaments crafted by temple smiths;⁴⁶ and the temple bowmen utilized temple animals and drew upon the temple's storehouses and treasures for rations and silver. Whereas we are aware of *rikis qabli* in private archives usually because its hefty expense caused some to turn to creditors (and thus produced texts), we are aware of it in temple contexts because the equipping of soldiers tapped certain sectors of the temple's bureaucracy, or because a particular situation necessitated the sanctioning of a course of action or relationship in a legal text.

Thus, not only was the Eanna able to muster a fighting force from among its personnel, it also armed them from its centrally located, self-sustained armory (or from remote armories and treasuries that it controlled), mounted them on its own animals, fed them out of its own stores, undertook its own repairs, dispatched them to established outposts, and so on.⁴⁷ Its military personnel were not obligated to serve on account of a land grant, nor would they have had to procure money to equip themselves, which further

⁴⁵ The only possible exception to this of which I am aware is the mention of hirelings in YOS 7 154:8 (here, pp. 224f.), but since the text states that these hirelings are to be considered apart from the bowmen of the oblates, it is possible that they were not bowmen at all. Hirelings are also mentioned in association with the outposts in the letter YOS 3 39:13f.

⁴⁶ Or, instead, were bought by the temple itself, see A. C. V. M. Bongenaar, "Money in the Neo-Babylonian Institutions," in *Trade and Finance in Ancient Mesopotamia*, MOS Studies 1, ed. J. G. Dercksen, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 84 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1999), 166 (esp. note 20).

⁴⁷ We do not know how many men the temple was able to muster and equip fully at any given time. YOS 3 44 records a royal order for 100 archers of the shepherds, TCL 13 140 mentions 29 (with an additional 8 mentioned later in the text), YOS 7 65 gives a grand total of 39, YOS 7 154 mentions 50 as bowmen, and YOS 6 151 proposes a muster of 70 bowmen of the shepherds. But, with the possible exception of YOS 3 44, none of these texts means to give a total of the Eanna's bowmen. Using that exception, it thus seems reasonable to assume that the Eanna expected to equip around 100 bowmen—both from the shepherds and the "oblates"—at any given time. Yet with this we must also realize that the Eanna had the facilities to create more weapons, had many more people attached to it, and, of course, had the wealth to buy additional munitions and persons.

suggests that such military personnel remained economically attached to the Eanna. In addition, they would not have been forced to pledge property to creditors in order to raise money to serve, nor would they have returned from service indebted, which may also have decreased the probability of desertion. This stands in direct contrast to evidence from private archives.

If nothing else the Eanna's self-equipped and centralized forces, in addition to its metal workers, stocked storehouses, arms depots and warehouses, ready-made cavalry, and urban location, made it both a productive asset in times of political stability and a potentially dangerous source of opposition in times of political disintegration or fragmentation. How various royal administrations co-opted the Eanna would be the subject of much speculation, as the available evidence simply does not shed much light on the political realities behind something like the Cyrus Cylinder or the various communications between the Eanna and Nabonidus. Yet I think it is best to assume that the Eanna was a force unto itself that promoted its own interests and had to be co-opted by the royal administration at Babylon through trade-offs and concessions. The relationship between the state and the various religious institutions throughout Islamic history may provide very instructive parallels for the relationship between the Eanna and Babylon.

CHAPTER SIX

THE SYSTEM AT WORK

I. Introduction

In the following pages I discuss the Eanna's livestock management as a system-at-work, exploring the social, economic, and legal relationships among the Eanna, its herdsmen, and its internal management. This necessarily entails some speculation, and I also highlight aspects of this system in need of scholarly attention. I first discuss the Eanna's external livestock management by examining the career of Nabû-nâšir/Lâqîpu, but at the outset it should be stated that I am not attempting to write his history. Instead I aim to use what we know about him to illustrate the relationships between the Eanna and its herdsmen as a whole. For example, I assume that YOS 6 155 marks Nabû-nâšir's first foray into livestock management; it may turn out that he already had a relationship with the Eanna and that the specific scenario I set up around him would no longer be valid as such. Such new information, however, would not alter the general description given here. The overview of Nabû-nâšir's career divides into four sections: a description of the legal relationship between Nabû-nâšir and the Eanna (II.A); an overview of Nabû-nâšir and the bow obligation (II.B); observations on day-to-day herd management (II.C); and a detailed look at *rēhu* as it is found in association with him (II.D). Following this I summarize the functioning of the internal livestock management (III). Finally I discuss the evidence for royal involvement in the Eanna's system of livestock management (IV);

in particular I evaluate evidence for taxation in animals in light of the findings of this dissertation.

II. Nabû-nâṣir/Lâqîpu

Nabû-nâṣir/Lâqîpu first appears in association with sheep and goats in the twelfth year of Nabonidus. In that year the Eanna granted his brother, Nanâ-aha-iddin/Lâqîpu, a herd of 2050 sheep and goats. The share-breeding contract between Nanâ-aha-iddin and the Eanna (YOS 6 155¹) also mentions a second set of animals that Nanâ-aha-iddin was to transfer to his brother, Nabû-nâṣir/Lâqîpu, in the first month of the following year. The size and composition of that second set of animals are given here in Table 6.1.

Table 6.1: Sheep and goats given to Nabû-nâṣir

	Sheep	Goats
Stud Male	20	—
Fertile Female	400	50
Young Male	160	20
Young Female	320	30
Total	900	100
	Sheep	Goats

I will assume that this transfer represented Nabû-nâṣir's first solo foray into livestock management and did not augment an already existing herd. The Eanna would have noted the number of animals at the herd's inception on a livestock inventory text, and from that point on Nabû-nâṣir would have owed animals to the Eanna as a *nāqidu ša rēhi*.

¹ See here, Chapter Three, pp. 40f. and 57f.

Livestock inventory texts were essentially the administrative counterparts to texts marking formal legal agreements such as YOS 6 155. They recorded the numbers of the different types, ages, and sexes of animals in the herd at its inception (i.e., the exact information in Table 6.1), thereby establishing the basis from which the Eanna calculated the growth of its share of Nabû-nâšir's herd. The method of such calculation will be discussed in detail below; for now it is important to emphasize that the formalizing of a relationship between Nabû-nâšir and the Eanna brought Nabû-nâšir into the Eanna's jurisdiction. From then on he was considered a legal entity separate from his brother's household; in YOS 7 83 they are each given a separate entry (lines 43f. and 45). We do not know why Nabû-nâšir separated from his brother. If their father was a herdsman, it is possible that YOS 6 155 marks the reorganization of the Eanna's animals upon his death. We simply do not know whether breeding contracts were heritable or whether the Eanna drew up new contracts to mark the division of its animals among sons in such instances. Whatever the case may be, the recognition of Nabû-nâšir as a distinct entity had two ramifications for him and the Eanna. The first is that Nabû-nâšir was brought into the Eanna's legal and administrative jurisdiction; the second is that Nabû-nâšir's household may have become liable for the bow obligation.

II.A. Nabû-nâšir and the Eanna

As to the first ramification, the Eanna entrusted to Nabû-nâšir a significant amount of its capital in female sheep and goats and he was expected to keep up with negotiated installment payments of male lambs. The Eanna would have assigned his account to a herd supervisor (*rab būli*). It is unclear with the available evidence whether his

arrangement with the Eanna made Nabû-nâšir a *širku* (“oblate”) of the Lady of Uruk (assuming he was not one before).² This is a complex issue in general that must remain unresolved until there is a thorough investigation of the economic, hierarchical, and social functions of *širku*-ship at the first-millennium Eanna. If, for whatever reason, the temple decided that Nabû-nâšir was no longer a *nāqidu* in good standing, he became liable for the animals under his control. If situations warranted he might even have to surrender personal property to cover losses and deficiencies. At the same time Nabû-nâšir may have taken animals from others on contract or may have contracted out part of his herd to another.³ We do not know whether it was legally permissible to use the Eanna’s capital at one’s disposal to secure credit for personal loans or business ventures, but I see little reason why this would not have been the case in practice.⁴

The vast majority of animals under Nabû-nâšir’s responsibility were considered the *makkûr Eanna*, “the property of the Eanna.” Therefore when issues and disputes about those animals arose—e.g., the theft of animals from his herd, threats of violence against his shepherds, or disputes over subcontracts and other legal divisions of the herd—they were hashed out before the uppermost temple authorities and at times the Eanna’s citizen council (*puhru*). Although this dissertation does not explore the relationship between the external management and the Eanna in terms of the remedying of legal disputes (I intend

² See, e.g., YOS 6 116 where *širku*-ship is associated with one’s service as a bowman and UCP 9/1, 36, which connects *širku*-ship with *rēhus* in sheep and goats, cattle, barley, and dates.

³ See for example TCL 12 119 which mentions the use of the Eanna’s animals for a business venture. Letters often mention the use of sheep and goats for non-sacrificial purposes; for example in YOS 3 76 the sender tells the recipient to use animals to pay off a creditor (lines 10-14) and later instructs him on how to care for animals for an upcoming festival.

⁴ See e.g., YOS 7 140:14 where one man claims that a *nāqidu* gave him the Eanna’s animals *kūm rašūtija*, “in lieu of credit (owed to) me.”

to do so in a separate article), it is worth noting that private herdsmen, or those herdsmen attached to the households of crown officials, would have been subject to a different jurisdictional sphere for the remedying of these same types of disputes. I do not, for example, know of any instances of private persons beseeching temple authorities for help in remedying extra-temple disputes about animals. Moreover, with regard to the theft of the Eanna's animals, there essentially was no arbitration; the corporate Eanna acts as both judge (with the authority to levy fines, compel witness to appear, etc.) and plaintiff in the trials of those accused of stealing its animals.

II.B. Nabû-nâṣir and the Bow Obligation

As I discuss in Chapter Five one of the unique characteristics of the royal “bow obligation” at the Eanna is that it appears to have been organized around households, not individuals. Therefore, the second ramification for Nabû-nâṣir was that the legal recognition of his household as distinct from his brother’s might have also made it liable for the bow obligation. If that were the case, the temple then expected him to supply a Bowman to a contingent that was organized by his *rab būli*. We do not know, nor do we have any hints at, the schedule by which households became liable for bow service. Whenever his obligation arose Nabû-nâṣir may have paid another to serve it for him, or, if he was without liquid or discretionary income, he may have served the obligation himself or made one of his sons or brothers go in his stead. As a Bowman Nabû-nâṣir (or his representative) was equipped from the Eanna’s storehouses and sent out to one of the

Eanna's outposts.⁵ His *rab būli* guaranteed that he would remain on post. While he served the obligation the Eanna fed him through its ration distribution system or provided him with cash to sustain himself. It is possible that on post he entered into the jurisdiction of the royal administration and was grouped into a unit of ten men with a decurion (Babylonian *rab ešerti*), who was picked from his cohort, serving as the leader. In fact Nabû-nâṣir is found as a decurion in YOS 6 151:7 (see here, Chapter Five, pp. 229ff.). As the text dates to Nabonidus year 10, two years before the division of animals between Nabû-nâṣir and his brother, he may have been the representative of his and his brother's combined households.⁶

II.C. Day-to-Day Herd Management

It appears that complications arose in the initial transfer of animals to Nabû-nâṣir. YOS 6 233 obligates Nabû-nâṣir to brand some animals three months after the scheduled transfer. This unusual text refers to the animals as rams and ewes (*pu-hal ù U₈*, twice [lines 1 and 7]), whereas most texts use the standard *UDU.NITÁ* or *sēnu* for an indeterminate number of sheep (and goats) of both sexes (as this text does for the total, line 10). Branding the animals with the star of Ištar marked them as the property of the Eanna; the fact that this text mentions grown animals and not newborns (i.e., the animals that are usually branded) connects it, at least circumstantially, to the transfer of animals

⁵ Texts from the Ebabbar archive have the bowmen performing menial work around the temple and going off on long-term expeditions (see A. C. V. M. Bongenaar, *The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 80 [Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 1997], 131ff.). The Eanna evidence is not as informative.

⁶ Another possibility is that YOS 6 155 marks a later development in his solo career and that he was indeed representing his own household in YOS 6 151:7.

mentioned above. The branding of mature animals would suggest that they are being incorporated into a new herd.

YOS 6 233
Uruk (Eanna)

27-IV-13
Nabonidus

1. 70 UDU.*pu-hal* ù U₈.MEŠ šá ^{md}AG-*na-sir*
2. A-šú šá ^m*la-qí-pi a-na* LÚ.A.KIN.MEŠ šá ^mNUMUN-iá LÚ.ŠÀ.TAM É.AN.NA
3. *la ú-kal-lim-ma la iš-me-et* ù 20 *še-e-ni ri-hi-it*
4. *eš-ru-ú šá* DUMU LUGAL šá MU.12.KAM ^dAG-IM.TUK
5. LUGAL TIN.TIR.KI šá *ina pa-ni* ^{md}NIN.IB-ia LÚ.NA.GADA
6. šá DUMU LUGAL *im-meš-ka-a₄*
7. PAP 90 UDU.*pu-hal* ù U₈.MEŠ NÍG.GA ^dGAŠAN šá UNUG.KI
8. *u ^dna-na-a ina* UGU ^{md}AG-*na-sir*
9. A-šú šá ^m*la-qí-pi ina* ITI.BÁR MU.14.KAM
10. ^dAG-I LUGAL TIN.TIR.KI *še-e-nu* ÀM
11. 90 *it-ti* [erasure] *qa-bu-ut-ti*
12. *ib-ba-kam-ma ina* KÁ ÍD.na-áš-ka-*pi-ru*
13. *i-šem-mi-it e-lat ri-ha-a-nu*
14. *maḥ-ru-tu*
15. *ina* GUB-zu šá ^mNUMUN-ia LÚ.ŠÀ.TAM É.AN.NA
16. A-šú šá ^m*ib-na-a* A ^m*e-gi-bi*
17. LÚ.*mu-kin-nu* ^{md}DI.KUD-ŠEŠ.MEŠ-MU A-šú šá ^mŠU A ^mši-*gu-ú-a*
18. ^m*na-din* A-šú šá ^{md}EN-ŠEŠ.ME-BA-šá A ^m*e-gi-bi*
19. ^{md}*in-nin-MU-ŠEŠ* A-šú šá ^mMU-^dAG A ^mki-*din-d*ŠÚ
20. LÚ.UMBISAG ^m*ba-la-tu* A-šú šá ^{md}30-DÙ A LÚ.SIPA-GU₄
21. UNUG.KI ITI.ŠU UD.27.KAM MU.13.[KAM]
22. ^dAG-IM.TUK LUGAL TIN.TIR.KI

Line 12: Ran Zadok, *Répertoire Géographique des Textes Cunéiformes*, Band 8: *Geographical Names According to New- and Late-Babylonian Texts*, Reihe B (Wiesbaden: Dr. Ludwig Reichert, 1985), s.v. *Nār-nāš-kāpīri* (p. 378), suggests that the *Nār-nāš-kāpīri* might be located near Uruk, but given Nabû-nāṣir's connections to Tagritenu (possibly modern Tekrit, see here, Chapter Five, pp. 229f.) this may be incorrect.

Line 20: The scribe in this text is a witness in YOS 6 155:28f.

(1-6) (Regarding) 70 rams and ewes, which Nabû-nāṣir/Lāqīpu did not show to the messengers of Zērija the chief administrator of the Eanna and did not brand, and 20 sheep and goats, the remainder of the tithe (payment) of the crown prince for the twelfth year of Nabonidus, king of Babylon, which remained behind under the responsibility of Ninurtaja, the herdsman of the crown prince.

(7-9) A total of 90 rams and ewes, the property of the Lady of Uruk and Nanā is debited against Nabû-nāṣir/Lāqīpu.

(9-13) In Month I (Nisannu), the fourteenth year of Nabonidus king of Babylon, he will bring forth the aforementioned 90 sheep and goats along with (his) fold and brand them at the sluicegate of the river Nāš-kāpiru.

(13-14) (This is) apart from prior *rēhus*.

(15-16) (This obligation was formulated) in the presence of Zērija/Ibnâ//Egibi the chief administrator of the Eanna.

(16-19) Witnesses: Mandānu-ahhē-iddin/Gimillu//Šigūa, Nādinu/Bēl-ahhē-iqīša//Egibi, Innin-šuma-uṣur/Iddin-Nabû//Kidin-Marduk.

(20) Scribe: Balāṭu/Sîn-ibni//Rē'i-alpi.

(21-22) Uruk, the twenty-seventh of month IV (Du'ūzu), the thirteenth year of Nabonidus, King of Babylon.

YOS 6 233 reveals crucial information about the day-to-day relationship between the Eanna and its external management. The branding of newborn animals was in a very real sense an annual assessment of the relationship between the temple and its herdsmen.⁷ Once newborn or newly acquired animals were branded with the star of Ištar they became identifiable temple property. A thirtyfold penalty was the standard for the outright theft of the Eanna's animals; unbranded animals were not afforded this protection, even if they were in the care of the Eanna's herdsmen.⁸ Moreover one assumes that the Eanna put legal restrictions of some sort on the sale or pledge of its branded animals by its herdsmen, although texts routinely mention these exact practices without implying negative consequences.⁹

⁷ For a parallel to this see YOS 6 150:18ff. (also YOS 6 11:12ff), which specifically states that all the offspring of cattle of the Lady of Uruk, which are attached to a leased piece of arable land, must be shown to the royal supervisor and scribes of the Eanna, branded, and then returned to the cattle herder.

⁸ Mariano San Nicolò, "Materialien zur Viehwirtschaft in den neubabylonischen Tempeln I," *Or. NS* 17 (1948): 288ff.

⁹ See, for example, Dillard NB Lewis Coll.: FLP 1584, and here, notes 3 and 4.

It is generally assumed that the branding of animals occurred every year in the Eanna precinct at the spring shearing,¹⁰ but YOS 6 233 implies that branding could be handled off-site. The mention of the sluicegate (*bābu*) of the canal Nāš-kāpiru confirms that the animals did not have to be brought to Uruk and amassed in the Eanna precinct in order to be branded. This is not surprising in itself. Animal branding requires only a branding iron (which was manufactured and maintained by the Eanna's smiths¹¹), a heat source, perhaps a device to secure the animal, and a representative of the temple authority, such as the messengers of the chief administrator of the Eanna in YOS 6 233.

In fact YOS 6 233 also suggests that other aspects of livestock administration could be handled off site.¹² Lines 3-6 refer to a delayed transfer of twenty animals as tithe (payment) from the crown prince to the Eanna, which Nabû-nāṣir was to collect, add to his herd (as the animals are already counted as a debit against him [lines 8f.]), and brand along with the first set of animals. This implies that temple income in live animals from outside sources could be allocated to herdsmen without having to be collected at the Eanna precinct. In YOS 6 233 the animals are collected as *ešrû*, but this could also hold true for animals collected as *irbu* and animals that were given to the Eanna in exchange for debts. The Eanna had shearing facilities (the *bīt gizzi*), but it remains unclear to me whether specialized equipment and/or skilled personnel were necessary for shearing sheep, or, for that matter, whether a functional *bīt gizzi* could be set up off site. The

¹⁰ See, for example, Govert Van Driel, "Neo-Babylonian Sheep and Goats," *Bulletin on Sumerian Agriculture* 7 (1993): 229. See also the texts cited here, p. 247 note 7—although these texts deal exclusively with cattle, there is no indication that the animals had to be brought to the Eanna.

¹¹ See, for example, GCCI 1 194:1f., which mentions branding irons for both cattle and sheep.

¹² See also Rocío da Riva, *Der Ebabbar-Tempel von Sippar in frühneubabylonischer Zeit*, AOAT 291 (Münster: Ugarit Verlag, 2002), 203ff. for her discussion of on-location herd inspections.

production and collection of wool and manufacture of textiles at the Eanna is a topic for exploration in itself.

The actual routine of herding is impossible to determine with the available evidence. There is, however, room for speculation based on incidental and anecdotal evidence from the texts, coupled with general information on livestock management. We infer from YOS 6 233 that most herds were continually in a state of flux, with outside animals being added to them and male lambs being extracted from them (see here, Chapter Three, pp. 64ff.) on a regular basis. We also assume that the herdsman used his capital to his advantage; perhaps he leased out some animals, or took animals from others on contract. Nabû-nâšir certainly put his animals under the control of a shepherd, or, as the herd grew, perhaps it was split up among several shepherds. We simply do not know how those shepherds were remunerated. Herding strategies are also difficult to discern, as they are dependent on ultra-specific geographic information, weather patterns, the safety of outlying areas at any particular time, and so on.

It is, however, important to stress the erratic nature of pre-modern sheep and goat rearing. Some years would have been successful, whereas others might have seen the loss of animals due to an epidemic or poor nutrition from lack of pasture. We should allow for high lambing rates in successful years. In general a herdsman's female animals will divide into three groups: (1) those females in their first cycle of sexual maturity and therefore of unproven fertility; (2) those females of proven fertility; and (3) those females of proven fertility nearing the limit of their ability to reproduce. The vast majority of female animals in any given herd will belong to group (2), and of these the

herdsman expects near 100% lambing rates. This is for the simple reason that herdsmen extract barren or infertile ewes from the herd, so a herdsman would cull a ewe that failed to produce an offspring for (say) two consecutive years. Moreover herdsmen know from experience at what age their ewes generally stop reproducing and hence also cull the ewes from the herd at that time. In other words, a herdsman would manage his ewes in order to insure that every one was productive or potentially so; he would also adjust the male-to-female ratio to ensure the yearly insemination of each ewe. Hence, a herdsman anticipates a nearly 100% lambing rate in years in which outside conditions (e.g., weather or pasture) were not deleterious. When set lambing rates of less than 100% are used, both in ancient herding contracts and in modern studies of sheep and goat management, they are meant to average out good and bad years. They also presumably intend to account for the fact that some lambs died at or shortly after birth, above the 10% allowance by the temple.

II.D. *rēḥu*

We find Nabû-nâṣir's herd again twelve years after YOS 6 233. Since we know the size of the herd at its inception (given my assumptions), we are able to calculate the Eanna's projected share of the herd at any time after that.

Table 6.2: Projected number of ewes and female lambs in Nabû-nâšir's herd from Nabonidus 12 to Cyrus 7^a

	12	12v	13	13v	14	14v	15	15v	16	16v	17/acc	17/accv	Cyr 1
ewes	400	360	648	583	727	654	887	798	1060	954	1273	1146	1528
female lambs	320	288	160	144	259	233	291	262	355	319	424	382	509
	1v	2	2v	3	3v	4	4v	5	5v	6	6v	7	
ewes	1375	1833	1650	2200	1980	2640	2376	3168	2851	3801	3421	4561	
female lambs	458	611	550	733	660	880	792	1056	950	1267	1140	1520	

^aTable 6.2 projects Nabû-nâšir's herd size following the pattern set by NBC 4897 (Chapter Three, pp. 44ff.). Using only the numbers for female animals, I begin with those recorded in YOS 6 155 for Nabonidus' twelfth year: 400 ewes and 320 female lambs. I deduct ten percent of each number to allow for the standard death rate; this results in the number of viable females (recorded as 12v, etc.). For Nabonidus 12 it is 360 viable ewes and 288 viable female lambs. To determine the projected number of ewes and lambs for the next year (i.e., Nabonidus 13) I took (but did not record) two-thirds the number of viable ewes in Nabonidus 12v, and then took two-thirds of that number to determine the number of projected female lambs. The number of ewes for Nabonidus 13 is found by simply adding together the number of viable ewes and the number of viable female lambs in Nabonidus 12v. So, the number of viable ewes in Nbn 12v is 360, which calls for 240 offspring in the following year, and of these 160 are female lambs. The number of projected ewes in Nbn 13 is simply the number of viable lambs in Nbn 12v (288) plus the number of viable ewes (360), which equals 648. Thus, these numbers for year 13 are reduced by 10% again to determine the number of viable animals (13v), and the calculations repeat.

Table 6.2 does not determine Nabû-nâšir's balance, as there is no accounting for male lambs or deductions of any sort, nor are the calculations influenced by actual developments in Nabû-nâšir's herd. The table simply follows the pattern that the Eanna used to project the number of ewes and female lambs. Thus, assuming no deductions or augmentations in ewes, in Cyrus year 7 the Eanna projected Nabû-nâšir/Lâqîpu to have 4521 ewes in his herd (or, with the death deduction for that year, 4069) and 1482 female lambs (or 1334). We can be certain that his herd was audited in Cyrus year 7, as we have a livestock inventory (GCC 2 265) for him dated to that year. When we find the herd

again in Cyrus year 7, in GCCI 2 265, there are only 802 ewes and 22 female lambs in the herd.

There are many possible reasons for this difference in ewes. Perhaps his herd was legally split up, a significant percentage died in an epidemic, or Nabû-nâšir was forced to render a number of ewes to the Eanna to pay off a debt. There also comes a time when a successful herd will grow beyond a herdsman's ability to care for it—e.g., limited pastureland will force the herdsman to reduce his herd size. In these instances a herdsman would have renegotiated his herding contract with the Eanna back down to a manageable number of animals. Given the disproportionate ewe-to-offspring ratio in GCCI 2 265, *something* happened to Nabû-nâšir's herd, and any one of these situations would have occasioned the drawing up of a new livestock inventory text. In general there is no reason to think that herdsmen came willingly to have their herds audited,¹³ and it is entirely possible, though I cannot find any direct evidence for it, that herdsmen who fell significantly short of their projected totals were held responsible in some way. Whatever the case may be, the audit of Nabû-nâšir's animals occasioned the drawing up of a new livestock inventory text (GCCI 2 265) and a reassessment of the number of animals that were due from him.

¹³ See, for example, TCL 13 137, where two herdsmen swear that they will come to Uruk and rectify their accounts of cattle and sheep by a particular day.

GCCI 2 265
Uruk (Eanna)

xx-xx-07
Cyrus

1. 18 UDU.*pu-hal*
2. 802 U₈.ME *ina ŠÀ 1 ir-bi*
3. 12 *ka-lum*
4. 22 *par-rat ina ŠÀ 2 ir-bi*
5. PAP 854 BABBAR-*tum*
6. 3 MÁŠ.GAL
7. 11 ÚZ.ME
8. 5 MÁŠ.TUR
9. 3 SAL.ÁŠ.GÀR
10. PAP 12(!) GE₆-*tum*
11. PAP-*ma* 876
12. *se-e-nu*
13. *ina IGI*^{md}AG-*na-ṣir*
14. A ^m*la-qí-pi*
15. MU.7.KAM m[*ku-raš*]
16. LUGAL TIN.TIR.KI
17. LUGAL KUR.KUR

An edition of this text appears in Mariano San Nicolò, "Materialien zur Viehwirtschaft in den neubabylonischen Tempeln III," *Or. NS* 20 (1951): 137ff.

(1-5) 18 rams, 802 ewes of which 1 is *irbu*, 12 male lambs, 22 female lambs of which 2 are *irbu*, a total of 854 "whites."

(6-10) 3 he-goats, 11 she-goats, 5 young male goats, 3 young female goats, a total of 12(!) "blacks."

(11-14) A grand total of 876 sheep and goats, under the responsibility of Nabû-nâṣir/Lāqīpu.

(15-17) The seventh year of Cyrus, king of Babylon, king of lands.

This text, written twelve years after the initial legal recognition of Nabû-nâṣir as a herdsman of the Eanna, marks a complete reassessment of the herd at Nabû-nâṣir's disposal. Around the time that GCCI 2 265 was composed the Eanna, probably at the behest of the royal administration, attempted to discern the number of animals that it projected to be on the hoof with all its herdsmen. The evidence for this count is found on two tablets that record the *rēhu* in sheep and goats, wool, and goat hair of the herdsmen

under the herd supervisors Ibni-Ištar (YOS 7 39) and Arad-Bēl (YOS 7 83). YOS 7 39 dates to Cyrus year 4; YOS 7 83 must date to just around the time of Cyrus year 7 or 8.¹⁴ In YOS 7 83 Nabû-nāṣir/Lāqīpu is found in line 45 with a *rēhu* in sheep and goats of 780, one in wool of 25 talents and 9 mina, and one in goat hair of 20 mina.

In this dissertation I argue that *rēhu*, which I translate “balance,” in terms of sheep and goats was a bookkeeping term that referred generally to animals owed to the Eanna under the control of the herdsmen. Herdsmen thus made payments in animals, or in something in place of animals, *ina rēhi*, “against (lit. from) the balance.” I postulate that the Eanna calculated *rēhu* by taking the mathematical projection of herd size, which included death deductions, and subtracting actual extractions from the herds. For example, if the Eanna projected that a herdsman would have 2000 sheep and goats at his disposal, and then it extracted 300 actual animals from his herd, the herdsman would have a *rēhu* of 1700. This is the ledger number of animals under his responsibility. However many actual animals he had is another matter.

So how does Nabû-nāṣir’s known *rēhu* compare with his contemporaneous livestock inventory text? YOS 7 83:45 and GCCI 2 265 record a similar number of sheep and goats. GCCI 2 265 gives Nabû-nāṣir a total herd of 876 animals, and YOS 7 83 gives him a *rēhu* of 780. Yet close examination reveals that, in fact, these two numbers represent the same thing. The subtotals of GCCI 2 265 report that Nabû-nāṣir had 854

¹⁴ See here, Chapter Three, pp. 72f.

sheep and 12 goats in Cyrus year 7.¹⁵ Assuming there was a standard ten percent death deduction for that year,¹⁶ Nabû-nâšir then had a total of 769 sheep and 11 goats that he owed the Eanna (i.e., his *rēhu*). In other words, this *rēhu* would be the mathematical projection of what he owed the Eanna, given that the herd was just audited that year, it had yet to reproduce, and there were no extractions yet taken from it. Adding these numbers together to determine his *rēhu* in *sēnu* (i.e., sheep and goats, as it is given in YOS 7 83) we get 780. This is his exact *rēhu* in sheep and goats reported in YOS 7 83:45.

The final mention of Nabû-nâšir among published texts is found in YOS 7 143 (Cambyses, xx-V-03), which lists extractions from various herdsmen.¹⁷ Nabû-nâšir, with two unknown associates, appears in lines 19ff.

- 19. 31 UDU.BAR.GAL 24 *ka-lum* 4 U₈.SAL.MAH_x PAP 59 šá še-e-nu-u
- 20. šá URU.tag-ri-i-te-nu šá ^{md}AG-na-ṣir A ^mla-qí-pi
- 21. ^mMU-MU ù ^{md}EN-KAM(!) A.ME šá ^mNUMUN-ia

31 *parru* lambs, 24 *kalūmu* lambs, 4 barren ewes—a total of 59 sheep and goats from the city of Tagritenu from Nabû-nâšir/Lāqīpu, Šuma-iddin and Bēl-ēreš, sons of Zērija.

We assume that deductions such as this would have occurred regularly throughout Nabû-nâšir's tenure as a herdsman. Each deduction would have been marked by a receipt. So, for example, here the Eanna would have issued Nabû-nâšir a receipt of some sort

¹⁵ The actual total of goats was 22, which is reflected in the grand total. If indeed the accountants and scribes were looking at GCCI 2 265 when they computed Nabû-nâšir's *rēhu*, they computed from the subtotal lines, not the total.

¹⁶ In NBC 4897 (see here, Chapter Three, pp. 44ff.) there was a death deduction taken out in the first year as well.

¹⁷ See here, Chapter Four, pp. 147ff. for an edition of this text.

acknowledging the extraction of fifty-nine animals from his herd. The sex and age of animals that were withdrawn would not have been of immediate importance, as determining his *rēhu* was simply a matter of subtracting one raw number (i.e., the number of extracted animals) from another (i.e., the projected number of animals to be under his responsibility), but such information might have been necessary for herd audits. On the occasion of an audit Nabû-nâşir's actual herd would have been inspected and counted, and he would have presented the accountant with receipts for extractions from the herd since the last audit. The accountant, in turn, would deduct the extractions from the year-by-year projections of herd size, and would thus determine the number of animals that the Eanna expected to be with Nabû-nâşir at that time. The Eanna would then compare this number to the actual number of animals that Nabû-nâşir had under his responsibility. We simply do not know how the Eanna handled the discrepancies between the two numbers.

Nabû-nâşir's dossier provides an opportunity to contextualize the meaning and function of *rēhu*. By happenstance GCCI 2 265 informs us that Nabû-nâşir's *rēhu* in YOS 7 83:45 corresponds almost exclusively to female animals (18 rams to 802 ewes, and 12 male lambs to 22 female lambs), but his *rēhu*, like that of the other forty herdsmen in the text, is listed in YOS 7 83 only as an intangible number with no reference to the actual constitution of his herd. Nabû-nâşir's *rēhu* was, in a sense, due from him and could have been collected if situations warranted. Yet it would have been counterproductive and contrary to purpose for the Eanna to do so. Instead, the Eanna kept its female animals on the hoof with its herdsmen, and the herdsmen, in turn, delivered male animals and other consumables to the temple. This is demonstrated by the

fact that internal management's audits and memoranda deal almost exclusively with male animals; when females do appear in these records they are often being distributed out to members of the external management. YOS 7 39 and 83 reveal that, for administrative and legal purposes, Eanna needed only to know the total number of animals that it expected to be with each herdsman. How the herdsmen managed the animals, and the brass tacks of livestock share breeding and bookkeeping, only came to bear at the renegotiation of herding contracts.

III. The Internal Livestock Management

According to YOS 7 143 the vast majority of animals that were extracted from the external management over the two months covered by the text were divided up between the offering shepherd and the *bīt urī*; a few animals were used in secondary offerings, five barren ewes were expended as rations, and two goats were given to the bronzesmith. The offering shepherd and the *bīt urī* constitute the two main branches of the internal livestock management.

The offering shepherd (*rē’i sattukki* or *rē’i ginē*) was not a shepherd in the normal understanding of the word. He was called such because he was in charge of the maintenance and ritual slaughter of the sacrificial animals. The vast majority of the animals under his control were male, so he was not an animal breeder. Moreover, his profession kept him at the Eanna; his stock in animals was continually turning over so there was no need to move around in search of pasture.

The offering shepherd took charge of his own bureau of livestock management at the Eanna. He had a staff called the “shepherds of the sacrificial sheep” (LÚ.SIPA.ME (or MEŠ) ŠÁ UDU.(NITÁ) SÁ.DUG₄ / *gi-né-e*) under him and the Eanna audited his bureau as a distinct entity. In terms of hierarchy no one outranked him in the area of livestock management. The *bīt urī* acted independently of him, and there is no evidence for an established higher office in charge of the Eanna’s animals in general. From years 2-7 of Nebuchadnezzar II at least two offering shepherds operated at the same time, and in years 21-23 of Nebuchadnezzar’s reign we know of at least four active offering shepherds.¹⁸

Ellen Robbins plausibly suggests that the offering shepherd and the *bīt urī* employed different methods of preparing animals for sacrifice and that the different sacrificial animal classifications found in ritual texts (barley-fed [ŠE.BAR KU], milk-fed [*kabri ša GA*], or not barley-fed [ŠE.BAR *la* KU]) reflect these different methods of preparation.¹⁹ This is indeed likely, and by process of elimination I conjecture that the offering shepherd had responsibility for milk-fed sheep.

The vast majority of the offering shepherd’s intake in animals came from the external management. The second largest number was from the sacrificial sheep of the *bīt ridūti* and the sheep of the royal offerings. He also received sheep as *irbu* and small numbers of animals from miscellaneous sources. It appears that he kept a one-to-three-

¹⁸ See Hans Kümmel, *Familie, Beruf und Amt im spätbabylonischen Uruk*, Abhandlungen der Deutschen Orient-Gesellschaft, 20 (Berlin: Mann, 1979), 84.

¹⁹ Ellen Robbins, “Tabular Sacrifice Records and the Cultic Calendar of Uruk,” *JCS* 48 (1996): 65f.

month supply of animals on hand and selected animals from his general pool to prepare for impending offerings.

The majority of animals that the offering shepherd prepared were expended in the daily *sattukku* (also: *ginû*) ritual, but others were sent off to a more or less regular set of secondary offerings (to Udannu, to the Ebabbar of Larsa, for *hitbu* offerings, for offerings at the gate, and others). Moreover, the offering shepherd sent animals to the *bituri*, and, if he did happen to acquire female animals, he distributed them out to the external management.

Administrative receipts and notes identify animals taken in from the external management and put under the responsibility of the offering shepherd. These notes most often take this basic form: x animals *ša PN₁ PN₂* (who is often a shepherd or relation of PN₁) *mahir ina pan PN₃ rē'i sattukki*, “x animals of PN₁ have been received from PN₂ (and are) under the responsibility of PN₃ the offering shepherd.” The one text (BIN 1 148) that shows the offering shepherd involved with the receipt of an *irbu* animal also has him transferring that animal to the external management.

The offering shepherd had to account for every animal that was put under his control. Texts that mark animals taken from the offering shepherd for sacrifices are rare; the examples take the basic form: x animals (*ša ina UDU.NITÁ ša ina pan PN₁*) *ana sattukki ša UD.X.KAM ... PN₁ rē'i sattukki mahir*, “x animals (which are from the animals which are under the responsibility of PN₁), for the offerings of x day(s) ... have been received from PN₁ the offering shepherd.” If an animal died while under his

responsibility the offering shepherd had to dispose of the carcass properly. There are numerous texts that mark the receipt of carcasses from the offering shepherd; these texts all take the basic form: *x pagr(ān)u* (...) PN *rē'i sattukki mahir*, “x carcass(es) (of various types of descriptions) ... have been received from the offering shepherd.”²⁰ The fact that the carcasses are received from the offering shepherd, and not disposed of through some overtly secular process, suggests that they served some function in ritual. Although this obviously seems unusual, it is reinforced by the fact that carcasses appear in tabular sacrifice texts, where they are labeled as taken from the offering shepherd as well.²¹ In other words, the offering shepherd disposed of the carcasses through the same process by which he disposed of live animals.

The *bīt urī* remains anomalous. Most of the evidence for it occurs in tandem with that for the offering shepherd. It is likely that it was a location for stock-feeding animals. There are, in fact, very few independent attestations of it as an administrative bureau, even though it appears to have been as important as, if not more important than, the offering shepherd in terms of general livestock management. The *bīt urī* also took in cattle, which was not the case with the offering shepherd.

Personnel from the *bīt urī* are difficult to identify; there was no *rab bīt urī*, or a profession called *ša bīt urī*, or the like. Yet at the same time a group of professions and “houses” (*mušākil alpī* “the oxen feeder,” *mušākil immerī* “the sheep feeder,” and the *bīt*

²⁰ On the use of the stative of *mahāru* in these and the previous examples see Chapter Four, p. 140 note 31.

²¹ See Robbins, “Cultic Calendar,” 68.

alpi “the oxen house,” and *bīt immerī* “the sheep house”) in all likelihood belong to the *bīt urī*. There are as yet no published audits or settlement of accounts for the *bīt urī* or any of its departments.

Indeed it appears that texts only refer to the *bīt urī* as a location. It was not in itself an actual corporate wing of the Eanna’s administration, but instead it was a place where stock houses and stock feeders operated. In other words the term was used for expository convenience for its departments as a whole (as it is in this dissertation); its constituent houses and professions would have been booked and audited separately. Even with this in mind the departments of the *bīt urī* remain elusive, but there is nothing in the available evidence to counter the assumption that the primary suppliers of livestock to the *bīt urī* were the same as those who supplied the offering shepherd.

According to the tabular sacrifice records the offering shepherd was expected to ready and send off an average of 120 sheep (four sheep daily for thirty days) monthly; the *bīt urī* would have turned out 150 in an average month (five sheep daily for thirty days). Some festival days in the tabular sacrifice records saw the sacrifice of between twenty and ninety sheep, while at times the offering shepherd did not send out any, which left the *bīt urī* to make up the difference. Thus the stock of both of the offering shepherd and the *bīt urī* was always turning over, each regularly taking animals in and sending them out for sacrifice. I estimate that the Eanna sacrificed between 3,500 and 4,000 animals every year.

IV. Animal Taxation?

Both the Neo-Babylonian and Achaemenid royal administrations are found involved with the Eanna's system of livestock management in a variety of ways. This involvement has attracted the attention of scholars since the 1940s and interpretations of it have found their way into most general histories that deal with first-millennium Babylonia. With this in mind, given my reconstruction of the Eanna's system of livestock management, I will conclude by reassessing the evidence for Babylon's interest in the Eanna's sacrificial economy. Royal involvement can be detected in the following instances:

- A lease of temple animals (YOS 6 155) is granted upon the command of Belshazzar the crown prince (there are parallel examples for this in temple agriculture);
- There is evidence that the Achaemenid satrap Gobyras called for an assessment of the Eanna's livestock. AnOr 8 61 mentions an oath sworn by herdsmen before the Eanna's chief administrator, its royal supervisor, and two scribes (one writing in cuneiform, one writing in Aramaic) who are called the messengers of Gobyras (AnOr 8 61:13ff.) *ša ana muḥhi amirti ša sēn* (wr. *se-en*) *u lāti* (ÁB.GU₄.HI.A) *šaprūnu* (text: *šap-par-ru-nu*), “who were sent for an inspection of the sheep and goats and cattle;”
- Also in Cyrus' fourth year AnOr 8 43 reports the following command from this same Gobyras to three herd supervisors: *attunu naphar nāqidī ša rēhi ša muḥhikunu ittikunu tabbaka* (text: *ta-ab-ba-ku*) *ana pan Gūbaru ittini tallaka*

(text: *tal-la-ku*), “you (pl.) will bring in with you (pl.) all the herdsmen with balances that are owed by you (pl.) and go to Gobyras with us;”

- YOS 7 39, which almost certainly mentions Gobyras’ Eanna contact Gimillu the *ša muhhi rēhāni* in line 67,²² lists the balances (*rēhu*, pl. *rēhānu*) of the herdsmen under the herd supervisor (*rab būli*) Ibni-Ištar for Cyrus year 4;
- A similar tablet, YOS 7 83, listing the balances of the herdsmen under the herd supervisor Arad-Bēl, almost certainly dates to Cyrus year 8;
- Gimillu continues in his function as *ša muhhi rēhāni* through at least Cambyses year 6;
- In Cambyses year 2 three texts mark specific extractions of animals and animal products for the king (see here, pp. 266ff.);
- The threat of the punishment of the king or Gobyras—whatever it may have meant in practice—is found associated with livestock management (and indeed other aspects of the Eanna’s economic life) throughout this time period.

This royal interest in the Eanna’s livestock management is certainly best viewed in light of the royal interest found in contemporaneous systems of temple agricultural management. Pierre Briant summarizes this latter aspect of royal involvement as follows:

²² On Gimillu and Gobyras see here, Chapter Three, pp. 123f. and Matthew Stolper, “‘No-One Has Exact Information Except for You’: Communication between Babylon and Uruk in the First Achaemenid Reigns,” in *A Persian Perspective: Essays in Memory of Heleen Sancisi-Weerdenburg*, Achaemenid History XIII, eds. Wouter Henkelman and Amélie Kuhrt (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 2003), 265–287.

Nabonidus, assisted by his son Bēlshazzar, introduced modifications [in temple agriculture management] that in general were not rescinded by Cyrus and Cambyses. In order to gain tighter control over such strategic financial powers and to improve agricultural profitability, the royal authority decided to play a direct role in the economic activities of the Babylonian temples under its control.²³

Along these lines I believe it is possible to ascertain in what manner, and then to postulate to what end, Babylon attempted to assess and influence the Eanna's system of animal husbandry. That is, if we take for granted that the royal authority decided to play a direct role in the economic activities of the Babylonian temples under its control, then the next step should be to determine what that role was (and was not) and its intended results. As I see it the evidence for royal involvement in the Eanna's system of animal husbandry falls into two categories.

First, there is substantial evidence, from the reign of Nabopolassar onward, that the crown was continuously feeding animals into the Eanna. This occurred under a variety of rubrics: *ešrû*, *irbu*, *sibtu*, and *bīt ridūti* and the sheep of the royal offerings (which were donated by various royal/municipal officials, see here, Chapter Four, pp. 178ff.).²⁴ According to Dandamaev the Eanna used cattle and sheep delivered as *sibtu* for "sacrifices on behalf of the king,"²⁵ and indeed it is possible that the *bīt alpi ša šarri*,

²³ From Cyrus to Alexander (Winona Lake: Eisenbrauns, 2003), 72.

²⁴ It is possible that it will be discovered that some of these rubrics subsume other ones—that, for example, *bīt ridūti* and the sheep of the royal offerings include *ešrû* offerings.

²⁵ Muhammad Dandamaev, "The Neo-Babylonian *rab šibti*," in *Assyriologica et Semitica: Festschrift für Joachim Oelsner*, eds. Joachim Marzahn and Hans Neumann, AOAT 252 (Münster: Ugarit-Verlag, 2000), 31.

“cattle house of the king,” which is referenced in a few texts,²⁶ was established to administer such royal offerings. Yet in YOS 7 8:8f. sheep from the *bīt ridūti* and the royal offerings are counted as debits (i.e., intake) for the offering shepherd, but the corresponding credit (outlay) section does not make particular mention of a special series of royal offerings. Nor, for that matter, are royal offerings included among the irregular secondary offerings in tabular sacrifice texts.²⁷ It thus appears that the royal offerings were included in the regular *sattukku* offerings.²⁸ It is also possible that royal cattle offerings were managed separately. Whatever the case may be, YOS 7 8, which audits the offering shepherd from the fifteenth year of Nabonidus until the first year of Cyrus, suggests that the Achaemenid administration continued to feed animals into the Eanna.²⁹ Indeed the *bīt ridūti* and the sheep of the royal offerings constitute twenty percent of the total number of animals that the offering shepherd collected during this period.

Second, we find Babylon directly involved with the management of *rēhu* and the harvesting of the Eanna’s own animals. The evidence for the former is detailed above: Gobyras, the Achaemenid satrap, orders a reckoning of the Eanna’s animals and later issues an order for the *nāqidū ša rēhi* to appear before him. We also know that one of Gobyras’ contacts at the Eanna, Gimillu the *ša muḥhi rēhāni*, was directly involved with

²⁶ See YOS 7 77:4, YOS 7 146:11f. and Moore Michigan Coll. 89:29.

²⁷ See the list and discussion in Robbins, “Cultic Calendar,” 77ff.

²⁸ Much the same seems true at Sippar, where animals that were received from extra-temple herds (i.e., from the royal/governmental administration) were marked as coming from outside the temple, but were sacrificed through the usual system (see da Riva, *Ebabbar*, 281).

²⁹ This is, of course, not certain, as the text does not give an exact date for the collection of animals for the *bīt ridūti* and the royal offerings. See John MacGinnis, *Letter Orders from Sippar* (Poznan: Bonami, 1995), 185ff. for a discussion of the evidence for the continuation of offerings and royal donations under the Achaemenids.

the management of *rēhu*, which resulted in a series of tablets that lists the *rēhu* in animals and fiber of hundreds of herdsmen. This Gimillu also tracked down recalcitrant herdsmen and involved himself in extracting animals. In fact his heavy-handedness perhaps due to his royal connections, and possible deception and abuse of power, may have resulted in local animosity against him. Moreover we find the threat of the punishment of the king and/or the satrap Gobyras used to secure transfers of sacrificial animals from the herdsmen to the temple, and I connect this to the royal mandate under which some herdsmen held the Eanna's animals (see here, Chapter Three, pp. 104f.). If indeed there was a royal policy to gain greater control over the temples, or simply to encourage greater profitability, then empowering local contacts or mandating crown retribution in order to obtain certain results might have been one practical application of that policy.

What we do not have evidence for is regular royal extractions of livestock from the Eanna. Particularly, nothing counterbalances the evidence that the royal administration regularly gave animals to the Eanna. Three well-known texts (GCCI 2 120, YOS 7 123, and AnOr 8 67) do mention the extraction of some animals and animal products for the royal administration, but, as has been noted, these three texts refer to one unique event.³⁰ Even with that in mind, these texts have been consistently misinterpreted since San

³⁰ See the editions and discussions of these texts cited here, note 31 (following). In addition to these YOS 6 131:13f. mentions three cows that were taken away from a herdsman at the command of the crown prince and entrusted to another person, but there is nothing in this text that associates the transfer of the animals with taxation.

Nicolò's original editions of them, and, given their historical importance and relevance to the topic at hand, I offer a revised interpretation here.³¹

GCCI 2 120 (Cambyses, 12-VIII-02) refers to a message from Gobyras (*šipirtu ša Gūbaru*) calling for the upper-level temple management to entrust eighty sheep and goats, the property of Ištar of Uruk, from the *bīt urî* to Zērija/Nanā-ēreš, who is certainly the herd supervisor of that name. Zērija is to send the animals to the chief administrator and royal supervisor of the Eanna at the still-unlocated royal palace at Amanu (also: Abanu) for the *šusbuttu* ("provisioning") of the king. This transaction is odd because it reverses the normal course of events. Zērija, the herd supervisor, is taking animals out of the *bīt urî*, whereas he and other herd supervisors usually arrange for transfers of animals into the *bīt urî*. This text does mark a real transfer of assets from the Eanna to the royal administration, but it was exceptional. Furthermore we also have evidence for the royal administration paying animals into the *bīt urî* on a regular basis. There is no evidence that the *bīt urî* bred animals, so it seems reasonable to assume that this transaction was in male animals and therefore did not represent a loss of animal capital for the Eanna.

³¹ Mariano San Nicolò's editions of these texts, in, "Zur Verproviantierung des kgl. Hoflagers in Abanu durch den Eanna-Tempel in Uruk," *ArOr* 17/2 (1949): 323-330, are satisfactory for general purposes, although his translation of (AnOr 8 67:4f.) 100 U₈ ȳ UDU.ŪZ šá ſi-zib as "100 Zibben und Milchziegen," is somewhat misleading, as both ewes and she-goats are qualified by šá ſi-zib ("of milk"). That said, the numbers or types of animals mentioned in these texts, which are of paramount importance for understanding them, are incorrectly cited in Muhammad Dandamaev's, "Royal paradeisoi," in *Orientalia J. Duchesne-Guillemin Emerito Oblata*, Acta Iranica 23 (Leiden: Brill), 116f. (p. 117: "200 heads of sheep and goats . . . 80 'full grown sheep' . . . more sheep and goats") and his *Iranians in Achaemenid Babylonia*, Columbia Lectures on Iranian Studies, ed. Ehsan Yarshater, 6 [Costa Mesa, New York: Mazda Publishers, Bibliotheca Persica, 1992], 108f. (p. 109 [referring to AnOr 8: 67]: "200 lambs and kids"); Pierre Briant cites a different set of incorrect numbers and animals in *From Cyrus to Alexander*, trans. Peter T. Daniels (Winona Lake: Eisenbrauns, 2002), 73f. (p. 73: "200 suckling lambs and kids . . . 80 fattened oxen").

YOS 7 123 (Cambyses, 25-VIII-02), written thirteen days after GCCI 2 120, mentions two separate transactions: in the first (lines 4-10) the herd supervisor Arad-Bēl/Šarru-kīn is obligated to provide he-goats and young male goats (lines 4f.: MÁŠ.GAL.MEŠ \dot{u} MÁŠ.TUR.MEŠ) to the chief administrator and royal supervisor of the Eanna at this same Amanu for no stated reason, but presumably connected with the šušbuttu mentioned in GCCI 2 120; in the second (lines 11-13), Arad-Bēl agrees to pay (*eṭēru*) sheep and goats and lambs (UDU.NITÁ.ME \dot{u} SILA₄.ME) for the offerings for the month of Kislīmu (month IX). As is noted in this dissertation and elsewhere, goats play a very minor role in the Eanna's animal economy. Although this text again references an extraction of (male) animals out of the Eanna, it is not of a type that affected the sacrificial economy, nor for that matter was it a loss of animal capital for the Eanna.

Finally, AnOr 8 67 is also unique. It dates to Cambyses 28-VII-02, just before the date of the prior two texts, so it certainly refers to the same event. In this text, which mentions a message from Parnaka,³² both Zērija and Arad-Bēl are obliged to bring and set up (lines 4f.) 100 U₈ \dot{u} UDU.ÙZ šá ši-zib, "one hundred ewes and she-goats of milk." As van Driel notes, ša šizbi ("of milk") here must refer to the fact that these ewes and she-goats are lactating.³³ In other words they are not to be slaughtered, but instead are to produce milk for the meal of the king (*naptanu ša šarri*, line 8), perhaps to be consumed as such or made into cheese or yogurt. This is reflected in the language of the text. The two herd supervisors are to bring and station (*abākuma ... šuzzuzzu*, lines 7-9) the ewes,

³² On Parnaka see Dandama(y)ev, *Iranians*, s.v. Parnaka (p. 108f. no. 222) and add Stolper, "No-One Has Exact Information," 275.

³³ "Sheep and goats," 241 and 251 n. 142.

whereas animals that are led to the slaughter are brought and given (*abākuma ... nadānu*). Although this is an extraction of sorts from the Eanna, it was obviously temporary and of an expendable product.

I am not attempting to discount the fact that these three texts do mark real extractions of temple animals and animal products from the Eanna for the royal administration. Nonetheless they refer to a one-time event, and even then GCCI 2 120 refers to the extraction of animals by a unique process, YOS 7 123 refers specifically to goats, which were peripheral to the Eanna's economy, and AnOr 8 67 refers to a temporary use of some of the temple's female animals. These are extractions of a unique sort, but they were taken from the extreme margins of a much larger economy.

Thus, apart from these three texts, I know of no other texts marking the transfer of livestock out of the Eanna to the royal administration. Unlike the general contracts on which most of the Eanna's orchards and grain fields were leased out, the livestock share-breeding contract YOS 6 155 does not call for payments to be made to crown or municipal officials.³⁴ Royal extractions are absent from the four temple audits of its various livestock handlers (NBC 4897, YOS 7 143, YOS 7 8, YOS 7 74), and in fact two of these audits mention significant inputs of animals from the royal administration.³⁵

³⁴ On these payments in agricultural contracts see Govert van Driel, *Elusive Silver*, Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, 95 (Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul, 2002), 166-185.

³⁵ NBC 4897 mentions *irbu* in lines 26f. and YOS 7 8 mentions the animals from the *bīt ridūti* and the royal offerings in lines 8f. Of the other two, YOS 7 74 does not count intake and YOS 7 143 only counts animals received over a period of two months, and these are only from the external management. A broken audit, GCCI 2 371:10 (Nabopolassar, 30-XIIb-12), mentions sheep of the royal offerings and *bajātānu* ceremonies, which are presumably outlays.

There are admittedly no published audits of the *bīt urī* or any of its departments, but there is evidence that the royal administration added animals to the *bīt urī*'s stock as well.³⁶

Not only do we see both the Neo-Babylonian and Achaemenid administrations routinely feeding animals into the Eanna's livestock pool though a variety of channels, we also see Babylon actively working to organize the Eanna's animal bookkeeping and enforce the procedures by which those animals were delivered to the temple. If indeed all this is the manifestation of Babylon's direct role in the economic activities of the Babylonian temples, then it can be said outright that the aim of this role in terms of animal management was not simply to siphon off animals as tax for the royal administration. In general, taking the evidence as a whole, we have full, and often overlapping, knowledge of how and when the temple assessed and harvested its animals, from their birth until death. As the situation stands today there is no evidence for regular taxation in live animals. Moreover the evidence for irregular royal extractions of live animals is dwarfed by the evidence that Babylon regularly gave animals to the temple.

What may prove to be the most fruitful approach toward understanding the royal administration's involvement with systems of temple agriculture and livestock management may be found at the other end of the spectrum, in what we may loosely term investment and manufacture.³⁷ If we assume a deliberate royal policy of encouraging greater exploitation of, or even adding to, the animal resources available to the temples,

³⁶ In general, it is a rare occurrence when the Eanna's live animals leave its jurisdiction; there is some evidence for the sale and trade of the Eanna's live animals, which is then balanced out by the fact that the Eanna occasionally purchased outside animals. See here, Chapter Two, p. 17f. note 12.

³⁷ It is also possible that we will uncover evidence for a head tax on cattle paid in cash (see the remarks by van Driel, *Elusive Silver*, 314).

but do not have corresponding evidence for outright extractions from the raw results of that increased exploitation, then it is possible that the aim of that policy was actually to increase existing capital, production, and manufacture in an effort to extract taxes (under whatever rubric) from the temple in the form of finished products. For example, the royal administration may have added animals to the temple's stock and aided in enforcing the procedure by which the Eanna collected animals, wool, and hides in an effort to see an exponential growth in animal consumables; this growth would then allow the royal administration to extract from the finished products of the Eanna's already existing butchering, tanning, and textile manufacturing processes. For butchering, this would entail redistribution of the king's share of meat cuts to local supporters through the prebend system;³⁸ for hides and wool, some might also have been filtered through the prebend system, but, the products being long-lived, movable, and storable, the temple's industrial-level textile manufacturing processes were probably best exploited through other channels. This could be done in a variety of ways: outright taxation, utilization of various redistribution channels set up for the king (e.g., the *quppu ša šarri*³⁹), or even through trade. This is indeed a complex set of problems, and scholars are only now turning their attention toward the prebendal and secular distribution of temple products. Whatever the case may be, following up on these lines of inquiry is obviously many volumes in the making.

³⁸ See some preliminary remarks on this in van Driel, *Elusive Silver*, 75-78.

³⁹ See Bongenaar, *Prosopography*, 104f.

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